M.O.648

AIR MINISTRY
METEOROLOGICAL OFFICE

THE OBSERVATORIES' YEAR BOOK

1945

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the Lerwick, Aberdeen, Eskdalemuir, and Kew Observatories

LONDON: HER MAJESTY'S STATIONERY OFFICE
1959

Universal Decimal Classification
550.38(058)
551.506.1
551.510.42(058)
551.594(058)

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1942 volume. p.119, third paragraph of Notes on the Meteorological Summaries should read:

The sunshine for the year, 1499 hours, was 30 hours above the average for the period 1906-1935. The sunniest months were April (216 hours). May (230 hours) and June (253 hours).

1943 volume. p.117, third paragraph of Notes on the Meteorological Summaries should read:

The sunshine for the year, 1574 hours, was 105 hours above the average for the period 1906-1935. The sunniest month was May, with a total of 247 hours.

1944 volume. p.115, last three lines of Notes on the Meteorological Summaries should read:

The sunshine for the year, 1358 hours, was 111 hours less than the normal for the period 1906-1935. The sunniest month was May, with 227 hours, whilst July had 107 hours, only 54 per cent of the normal for that month.

1959

Universal Decimal Classification
550.38(058)
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PREFACE

The *Observatories' Year Book* was published for the years 1922 to 1937 in continuation of Part III Section II and Part IV of the *British Meteorological and Magnetic Year Book* for the period 1908 to 1921.

Publication of the *Observatories' Year Book* was necessarily suspended during the 1939-45 war. Restrictions on supplies and printing since the war resulted in a regrettably long delay in the resumption of publication. In face of the formidable accumulation of arrears, and taking changed requirements into account, it was decided to adopt an abridged form as outlined below.

It was agreed that the General Introduction to the Meteorological Tables and the parts of the Sectional Introductions which deal with site, instruments, precedure and tabulation included in the volume for 1938 should serve as standards of reference for several years; and that only important departures from these standards, together with any requisite additional information, should be included in the relevant parts of the volumes for the years after 1938. The space devoted to the discussion of observations was reduced. Monthly tables of individual hourly values of meteorological elements were discontinued, but summaries of daily mean values (or totals), monthly means (or totals) of hourly values and some maximum and minimum values are given. The diary of cloud, weather and visibility was also discontinued. No major changes were made in the atmospheric electrical and magnetic tables. The aerological and seismological tables were discontinued after 1939.

The present volume, 1945, presents atmospheric electrical and geomagnetic data for Lerwick Observatory; meteorological data for Aberdeen; meteorological, atmospheric electrical and geomagnetic data for Eskdalemuir; meteorological, atmospheric electrical and atmospheric pollution data for Kew.

Meteorological and geomagnetic data for Valentia Observatory are no longer included in the *Observatories' Year Book*, but are published by the Dublin Department of Industry and Commerce Meteorological Service.

Manuscript tabulations of hourly values of the meteorological elements are available at the observatories. Request for information from these tabulations should be addressed to the Director-General, Meteorological Office, Air Ministry, Victory House, Kingsway, London, W.C.2.

NOTE ON THE TABLES: Maximum and minimum values are shown in italics.

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ERRATA IN PREVIOUS VOLUMES

Observatories' Year Books, 1942 and 1943

1942

P.128, Table 173 Daily totals and monthly and annual means of duration of bright sunshine with percentage of possible for each day should be cancelled and substituted by the following table.

P.129, Table 174 Monthly and annual hourly totals of duration of bright sunshine should be cancelled and substituted by the following table.

1943

P.126, Table 173 Daily totals and monthly and annual means of duration of bright sunshine with percentage of possible for each day should be cancelled and substituted by the following table.

P.127, Table 174 Monthly and annual hourly totals of duration of bright sunshine should be cancelled and substituted by the following table.

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

173 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1942

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	...	...	...	...	...	...	...	...	...	7·9	61	1420	9·8	66	1840	8·6	53	1720
2	...	...	...	...	...	...	0·9	8	180	10·7	83	1920	8·2	55	1230	11·0	68	2370
3	...	...	...	...	...	...	2·1	19	290	0·4	3	100	11·4	77	1710	12·5	77	2340
4	1·0	13	60	...	...	...	...	...	...	4·2	32	580	*12·4*	*83*	2370	14·1	*86*	2250
5	3·2	40	290	...	...	...	...	...	...	5·8	44	640	11·5	77	1700	14·0	85	2040
6	4·6	58	410	...	...	...	...	...	...	4·4	33	220	12·3	82	2840	14·0	85	2060
7	1·0	13	150	0·2	2	...	0·1	1	10	4·2	32	290	11·6	77	*2910*	11·5	70	2360
8	2·6	31	230	3·1	33	260	8·6	76	*1110*	6·5	49	910	12·1	80	1550	10·8	66	1270
9	3·4	43	310	...	...	...	3·0	26	440	0·6	5	60	11·0	72	2050	4·5	27	660
10	1·5	19	160	0·5	5	50	0·1	1	40	8·7	65	1100	3·7	24	280	7·6	46	870
11	0·2	2	180	1·7	18	170	...	...	...	2·6	18	280	3·0	20	500	12·6	76	2130
12	2·8	34	170	0·2	2	40	...	...	...	10·0	73	1430	...	...	...	...	...	...
13	...	...	...	6·5	67	*900*	7·2	62	680	5·8	42	650	2·8	18	230	5·8	35	550
14	...	...	...	*6·9*	*70*	660	3·7	32	520	11·3	82	1710	5·2	34	570	8·4	50	1000
15	...	...	30	...	...	...	4·1	35	430	12·2	89	2320	6·9	44	710	0·6	4	80
16	...	...	...	2·0	20	190	0·3	3	20	*12·6*	*92*	*2520*	10·3	66	1310	1·5	9	200
17	...	...	10	...	...	...	0·1	1	10	6·8	49	1050	6·6	42	970	9·6	58	1210
18	...	...	...	...	...	...	0·7	6	40	4·9	35	390	1·1	7	80	0·6	4	80
19	...	...	...	2·2	22	150	0·9	7	90	8·7	62	1050	12·1	77	1900	1·2	7	130
20	...	...	...	...	...	...	...	...	...	6·4	45	740	3·9	25	470	6·2	37	790
21	0·2	2	90	0·4	4	40	...	...	...	0·9	5	80	1·1	7	70	10·6	64	1360
22	2·5	29	240	3·9	38	310	...	...	...	3·8	27	290	3·4	21	360	*14·2*	*86*	2470
23	...	...	...	0·1	1	10	*9·8*	*80*	1090	2·6	18	250	3·9	25	370	13·5	82	*2510*
24	0·2	2	30	...	...	...	5·1	49	460	11·0	76	1980	10·0	63	1650	8·7	52	980
25	*5·1*	*59*	480	2·2	21	180	6·7	54	550	11·0	76	1440	1·5	9	90	6·2	37	630
26	0·2	2	...	...	...	...	5·1	41	600	8·7	60	1330	7·3	45	980	11·1	67	1680
27	1·3	15	160	4·4	41	460	1·9	15	170	11·8	81	1790	6·7	43	690	8·4	51	1380
28	3·8	43	*510*	1·9	18	310	3·0	24	340	9·0	62	1430	9·8	61	1410	6·1	37	890
29	...	...	...				6·4	51	510	10·0	68	1980	8·6	55	1230	13·0	79	2410
30	...	...	...				2·0	16	250	12·5	85	2290	10·9	67	1770	5·8	35	610
31	0·2	2	10				...	...	...				11·1	69	1250			
Mean	1·10		110	1·29		130	2·35		250	7·20		1070	7·42		1130	8·42		1300

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	7·9	48	890	7·9	52	1130	3·6	27	510	7·9	68	1320	...	...	...	3·2	40	390
2	4·6	28	420	4·2	27	460	5·9	44	870	*9·4*	*81*	1230	5·0	52	640	0·9	11	120
3	3·5	21	340	4·2	28	670	1·6	12	230	5·8	51	390	2·5	26	320	...	...	...
4	3·4	21	180	0·6	4	70	7·8	58	1480	1·2	11	90	...	...	...	3·8	47	420
5	7·6	46	860	1·6	11	110	6·8	51	1330	0·3	3	30	...	...	...	3·1	39	410
6	9·2	56	1550	3·0	20	280	10·6	80	2110	0·1	1	...	6·5	70	840	2·5	31	290
7	12·5	77	1750	0·7	5	100	7·6	58	1330	...	...	...	2·6	28	360	...	...	...
8	5·0	31	800	...	...	...	*11·6*	*89*	*2140*	3·6	32	550	*7·2*	*78*	*1160*	0·5	6	70
9	6·0	37	1060	7·9	53	1150	2·2	17	220	1·2	11	170	3·8	41	380	3·1	39	460
10	...	...	...	0·4	3	30	10·4	81	1320	3·5	32	540	5·9	65	770	0·1	1	...
11	6·7	41	690	8·1	55	1160	8·9	69	810	7·7	70	1240	...	...	...	0·3	4	30
12	9·5	59	1420	8·0	54	1130	3·0	23	350	1·4	13	210	...	...	...	*6·0*	*77*	640
13	7·0	42	850	1·8	12	160	0·2	2	10	5·0	46	430	...	...	10	...	...	...
14	4·3	26	540	4·6	31	580	0·3	2	20	1·2	11	130	1·5	17	170	1·8	23	180
15	11·0	68	1670	4·6	31	520	7·6	60	1890	8·2	77	*1770*	...	...	...	0·5	6	80
16	4·2	26	450	8·3	57	1460	9·4	75	1560	4·2	40	590	1·0	11	120	...	...	...
17	0·1	1	...	*12·5*	*86*	*2780*	0·3	2	50	0·3	3	40	2·2	25	230	1·7	22	120
18	...	...	...	11·0	76	2260	3·2	26	280	0·4	4	20	4·3	50	460	...	...	...
19	6·6	41	1230	5·0	35	590	4·0	32	660	3·4	32	420	...	...	...	...	...	10
20	0·4	3	20	8·2	57	1390	0·9	7	40	0·1	1	...	2·1	25	200	1·4	18	160
21	6·6	42	760	3·1	22	660	...	...	...	6·3	61	1070	...	...	...	0·2	3	10
22	0·1	1	...	3·6	25	310	0·3	2	10	...	...	...	4·0	47	250	0·6	8	50
23	2·1	13	210	6·2	44	910	6·3	52	1080	0·2	2	10	0·5	5	120	4·3	55	560
24	7·9	50	1000	7·2	51	1060	6·3	52	910	6·4	63	1040	...	...	50	5·8	75	*900*
25	6·4	41	660	0·4	3	10	1·0	8	90	2·3	23	290	...	...	...	0·1	1	20
26	2·5	16	270	3·0	22	300	1·2	10	80	...	...	...	0·1	1	...	...	...	...
27	1·3	8	100	10·6	76	1660	4·8	40	520	3·0	30	440	...	...	...	...	...	...
28	10·8	69	1440	10·8	78	2040	...	...	...	...	...	...	1·2	15	110	...	...	...
29	4·6	30	610	6·1	44	630	1·0	9	100	...	...	...	1·5	18	120	5·7	73	540
30	11·1	71	1990	4·2	31	310	0·1	1	10	1·0	10	80	4·0	49	250	3·0	39	20
31	*13·0*	*85*	*2130*	1·1	8	180				2·0	21	150				5·4	69	540
Mean	5·68		770	5·13		780	4·23		670	2·77		390	1·86		220	1·75		190
							Annual mean			4·10		590						

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

174 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1942

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
									hours											
Jan.	–	–	–	–	···	0·9	3·1	5·7	6·1	*7·5*	5·7	3·7	1·1	···	–	–	–	–	33·8	13
Feb.	–	–	–	···	···	2·5	3·8	3·3	4·3	*7·0*	6·8	6·5	1·8	0·2	···	–	–	–	36·2	13
Mar.	–	–	···	0·1	1·9	5·6	6·6	9·0	10·5	*11·1*	10·0	8·2	6·6	3·0	0·2	···	–	–	72·8	20
Apr.	–	···	0·7	10·2	17·4	20·3	21·1	*21·6*	20·1	20·3	20·9	18·0	18·3	15·7	10·7	0·7	···	–	216·0	52
May	···	0·5	8·4	15·0	16·5	19·2	19·4	18·7	*19·8*	18·2	16·6	19·7	16·1	15·5	16·1	10·6	1·9	···	230·2	48
June	···	2·9	13·5	17·5	*20·7*	20·4	*20·7*	19·4	19·5	18·0	16·3	19·1	15·9	16·8	16·6	11·6	3·8	···	252·7	51
July	···	1·0	5·2	9·7	11·8	12·2	11·6	13·1	14·6	15·4	*16·5*	16·0	13·9	11·6	12·3	9·7	1·3	···	175·9	35
Aug.	–	···	2·0	8·0	11·5	12·6	15·8	15·5	*15·9*	14·7	13·3	9·9	12·2	11·9	10·7	4·9	···	–	158·9	35
Sept.	–	–	0·5	6·8	10·1	11·5	10·8	12·5	13·3	13·0	*13·5*	13·3	10·1	7·3	4·2	···	–	–	126·9	33
Oct.	–	–	–	···	2·3	8·0	8·7	9·8	10·9	*11·5*	10·6	9·5	8·7	5·8	0·3	–	–	–	86·1	26
Nov.	–	–	–	–	···	1·0	4·6	8·9	*11·1*	10·6	9·5	8·0	2·2	···	–	–	–	–	55·9	21
Dec.	–	–	–	–	···	1·2	6·2	7·7	10·4	*11·0*	9·9	6·8	0·8	···	–	–	–	–	54·0	22
Annual	···	4·4	30·3	67·3	92·2	115·4	132·4	145·2	156·5	*158·3*	149·6	136·7	107·7	87·8	71·1	37·5	7·0	···	1499·4	34

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

173 KEW OBSERVATORY: h_S(height of recorder above ground) = 13·3 m. 1943

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	···	···	···	2·4	26	310	6·7	62	710	···	···	···	5·1	35	670	6·5	40	610
2	1·6	20	190	4·5	50	540	···	···	···	1·5	11	110	0·1	1	50	3·8	23	410
3	4·2	53	530	7·0	76	950	···	···	···	6·8	52	770	11·1	75	1190	3·6	22	260
4	0·6	8	90	1·5	16	140	3·0	27	280	6·9	53	930	13·7	*92*	2700	3·7	23	600
5	···	···	···	···	···	···	4·9	44	520	10·4	79	2100	0·1	1	30	4·1	25	460
6	···	···	···	1·4	15	150	2·0	18	180	7·1	54	1170	0·4	3	70	6·3	38	1020
7	···	···	···	3·3	35	380	5·2	46	510	2·5	19	440	9·0	60	1590	8·1	49	1390
8	2·3	29	250	0·2	2	10	5·0	44	570	7·8	58	1060	2·0	13	140	···	···	···
9	0·6	7	90	···	···	···	8·0	70	950	···	···	···	7·2	47	1340	5·2	32	830
10	···	···	···	0·5	5	80	4·9	43	710	···	···	···	···	···	···	3·3	20	300
11	2·0	25	160	0·7	7	100	···	···	10	1·6	12	230	5·3	34	840	8·6	52	1060
12	···	···	···	0·4	4	50	7·8	67	620	···	···	···	1·0	6	100	13·2	80	2640
13	4·1	49	*600*	7·5	*78*	*1160*	3·2	27	420	11·7	86	2340	13·2	86	2750	7·0	43	1130
14	3·5	43	260	1·0	10	70	8·0	69	900	2·5	18	370	12·2	79	2720	9·2	55	1850
15	2·7	33	400	5·4	55	690	5·0	42	550	8·6	62	1740	11·2	72	2600	7·8	47	1120
16	···	···	···	7·0	70	910	7·9	67	*1050*	10·6	76	1550	*14·2*	91	2820	4·7	28	800
17	0·1	1	20	1·9	19	230	2·7	23	240	10·7	77	1740	12·6	80	1750	13·8	80	2160
18	···	···	10	5·5	54	730	*8·4*	*70*	950	*12·5*	*90*	*2720*	14·0	89	2970	0·2	1	70
19	0·5	6	40	6·3	62	870	0·3	3	20	3·7	26	500	13·6	87	*3060*	7·9	48	1510
20	0·2	2	10	···	···	···	0·1	1	···	11·9	84	2450	11·0	70	1510	11·0	66	1870
21	4·9	58	590	···	···	···	1·3	11	110	5·2	36	600	9·8	62	1070	10·5	63	1880
22	1·0	12	90	···	···	···	6·2	51	330	0·1	1	10	5·1	32	750	8·9	54	1740
23	2·6	30	360	···	···	···	6·0	49	450	2·3	16	100	10·2	64	1500	8·3	50	1130
24	1·2	14	170	5·9	56	790	0·7	6	40	9·4	65	1760	0·3	6	30	*13·9*	*84*	*2780*
25	0·1	1	···	2·2	21	210	0·8	6	110	9·9	69	1580	10·4	65	1870	6·0	36	910
26	3·5	40	420	*7·6*	72	740	2·0	16	250	7·8	54	930	7·0	44	1360	9·5	58	1280
27	0·2	2	···	4·8	45	450	1·0	8	110	4·2	29	440	10·0	62	1920	6·3	38	550
28	···	···	···	0·3	3	20	7·1	55	1040	4·7	32	490	10·5	65	1740	9·8	59	2010
29	*6·0*	*67*	590				2·8	22	490	5·9	40	920	13·0	81	1820	7·6	45	1160
30	1·8	20	170				1·7	13	240	···	···	···	7·1	44	1130	4·5	27	590
31	···	···	···				1·4	14	230				6·8	42	770			
Mean	1·40		160	2·74		340	3·69		410	5·54		900	7·79		1380	7·11		1140

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	13·4	80	2720	10·1	61	1460	0·1	1	10	1·1	9	960	···	···	···	···	···	10
2	11·0	67	2150	6·3	41	1000	4·9	36	670	*9·0*	*78*	*1750*	0·5	5	50	3·9	48	460
3	10·1	61	1820	6·6	43	1210	3·2	24	440	8·8	77	1470	0·8	8	130	0·8	9	80
4	8·5	52	1090	6·4	42	1040	10·1	75	*2140*	0·4	4	50	0·4	4	20	5·0	62	440
5	1·5	8	140	4·9	32	900	3·5	26	450	···	···	···	···	···	···	2·9	36	260
6	6·6	40	1040	4·2	28	280	8·2	62	1790	0·3	3	40	0·6	6	60	···	···	10
7	11·4	70	1480	0·2	1	50	2·4	18	260	1·4	12	180	*7·0*	*75*	*970*	···	···	···
8	4·7	29	540	1·4	9	220	6·7	51	1110	5·5	49	620	0·3	3	40	···	···	···
9	1·5	9	130	11·5	74	1860	7·7	59	1060	5·6	51	590	3·6	39	470	0·1	1	10
10	0·4	2	50	4·2	28	570	0·9	7	180	0·1	1	80	3·6	40	500	0·3	4	60
11	0·3	2	30	1·7	11	160	8·2	63	1410	3·0	27	230	3·3	36	410	0·2	3	60
12	6·5	40	870	9·8	66	1560	1·3	10	120	···	···	10	0·3	3	10	···	···	···
13	9·5	59	1120	2·5	17	360	2·3	18	170	0·3	3	40	1·8	20	170	1·3	17	180
14	2·0	12	300	9·6	65	1540	6·8	53	1130	0·6	6	40	0·2	2	30	···	···	···
15	0·8	5	130	*13·0*	*89*	2000	8·5	66	1150	4·2	39	520	4·6	52	420	···	···	···
16	8·6	53	800	12·6	87	*2950*	0·7	6	100	4·1	39	540	···	···	40	···	···	···
17	*14·6*	*91*	*3150*	7·0	48	1260	1·6	13	310	3·6	34	650	2·0	23	190	···	···	···
18	1·9	12	190	9·1	63	1340	8·5	68	1070	5·6	53	720	6·4	74	710	···	···	···
19	1·5	9	110	10·1	70	2060	5·2	42	770	3·0	29	800	3·5	40	380	0·3	4	20
20	2·8	18	240	4·9	34	590	4·5	36	440	5·2	50	840	···	···	···	*5·8*	*75*	*680*
21	···	···	···	0·8	6	30	0·3	2	20	1·5	15	240	···	···	···	···	···	···
22	4·2	23	530	10·7	75	1900	10·3	85	1900	2·5	24	340	···	···	···	5·0	65	520
23	···	···	···	9·9	70	1720	9·1	75	1520	2·6	25	420	···	···	50	0·1	1	60
24	2·0	13	150	11·6	83	1930	*10·4*	*86*	1880	4·7	47	800	2·1	25	260	4·1	53	370
25	12·6	80	1400	8·7	62	1530	6·8	57	1100	3·7	37	410	6·2	74	840	···	···	···
26	8·2	52	1130	5·3	38	890	3·5	29	410	0·1	1	50	0·3	4	110	···	···	20
27	8·5	54	1400	8·7	63	1610	7·6	64	1090	4·0	40	390	···	···	···	···	···	···
28	9·4	61	2040	0·1	1	10	0·4	3	60	0·2	2	10	···	···	···	···	···	···
29	11·8	76	1810	2·3	17	280	0·1	1	10	···	···	···	5·2	63	630	···	···	···
30	12·9	84	2170	3·1	22	550	···	···	···	···	···	50	0·6	7	50	4·0	51	430
31	11·8	76	2110	3·3	24	290				···	···	···				0·8	10	160
Mean	6·41		1000	6·47		1070	4·79		760	2·61		380	1·78		220	1·11		120
							Annual Mean			4·29		660						

See Introduction for corrections to tabulated values of radiation.

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

174 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1943

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	2·5	5·3	6·8	8·6	*10·0*	6·0	3·6	0·9	···	–	–	–	–	43·7	16
Feb.	–	–	–	···	0·2	5·9	10·9	*12·8*	11·8	11·0	9·7	8·5	6·0	0·5	···	–	–	–	77·3	28
Mar.	–	–	···	0·6	4·1	7·7	9·9	10·8	14·0	15·7	*16·5*	15·6	13·3	5·7	0·2	···	–	–	114·1	31
Apr.	–	···	0·6	8·6	15·1	16·1	*17·5*	17·4	14·9	15·0	13·7	13·6	12·3	12·7	7·2	1·6	···	–	166·3	40
May	···	0·7	10·5	17·5	19·7	*21·7*	21·3	20·5	20·1	20·1	18·4	17·9	17·4	17·8	14·1	8·6	0·9	···	247·2	51
June	···	2·9	10·8	14·2	15·3	15·4	*17·2*	16·8	16·6	16·6	16·9	12·9	13·7	12·9	12·9	12·3	5·9	···	213·3	43
July	···	1·8	7·4	10·6	11·9	14·5	*16·0*	15·9	15·9	15·5	15·0	13·7	13·1	15·6	15·4	13·4	3·3	···	199·0	40
Aug.	–	···	4·6	11·0	14·2	*17·7*	16·6	17·2	19·0	15·4	17·0	18·5	14·6	14·6	11·8	7·8	0·6	–	200·6	45
Sept.	–	–	···	2·2	11·2	*15·3*	*15·3*	12·7	14·1	15·2	14·4	14·0	12·9	12·4	4·1	···	–	–	143·8	38
Oct.	–	–	–	0·1	1·9	5·9	7·4	8·0	10·5	12·6	*13·5*	11·8	6·4	2·7	0·3	–	–	–	81·1	24
Nov.	–	–	–	···	···	2·3	6·0	9·1	9·6	*9·8*	9·0	6·3	1·2	···	–	–	–	–	53·3	20
Dec.	–	–	–	–	···	···	2·0	6·6	7·4	7·5	*7·9*	3·2	···	···	–	–	–	–	34·6	14
Annual	···	5·4	33·9	64·8	93·6	125·0	145·4	154·6	162·5	*164·4*	158·0	139·6	111·8	94·9	66·0	43·7	10·7	···	1574·3	35

LERWICK

LERWICK OBSERVATORY

Latitude	60°08′N.
Longitude	1°11′W.
G.M.T. of Local Mean Noon	12h. 5m.
Height of site above M.S.L.	80 to 90 metres

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Change and additions only are mentioned here.

ATMOSPHERIC ELECTRICITY

No changes were made in 1945.

TERRESTRIAL MAGNETISM

The average day-to-day change of temperature in the magnetograph house for each of the twelve months of 1945 and for the year as a whole was as follows (in degrees Absolute):

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
0·31	0·39	0·27	0·35	0·36	0·40	0·37	0·41	0·26	0·26	0·43	0·45	0·35

There were 25 occasions on which the change reached or succeeded 1°A.

As already stated in the 1938 Year Book a Smith portable coil magnetometer, which had been reconstructed to operate as a Schuster-Smith coil magnetometer, was brought into use and adopted as the standard instrument for horizontal force in October 1939.

The volume for 1938 contains a statement on the corrections arising from the instrumental changes and comparisons, to be applied to the values of H, D and V published for the years 1923-1938. Corresponding corrections have not been applied to the individual values in the four tables for each month given in this volume (1945) but are shown in the tables and repeated below. The values of the elements given in Table 58 and elsewhere in the volume have been corrected.

Corrections

H	−6γ throughout
D	−4·3′ throughout
V	varies from month to month as below

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
−7γ	−7γ	−6γ	−6γ	−5γ	−5γ	−4γ	−4γ	−4γ	−4γ	−3γ	−3γ

NOTES ON THE RESULTS

The factor to change variations of D expressed in minutes to units of force (γ) perpendicular to the magnetic meridian was approximately 4·18.

Comparing the mean values for all days of 1945 with those for 1944 it is noted that H decreased by 4γ, D (West) decreased by 8·8′ and V increased by 23γ. The ranges between the extreme values recorded during 1945 were H, 1343γ, D, 2°9·8′, V, 793γ.

At the assembly of the International Association of Terrestrial Magnetism and Electricity at Washington in September 1939, a new measure of magnetic disturbance, the *K* index, was agreed upon. Measurements of *K* are now given in this volume, replacing the former measure $(HR_H + VR_V)10^{-4}$, in accordance with the International Association of Terrestrial Magnetism and Electricity circular letter dated January 20, 1940.

The *K* index is fully described in *Terrestrial Magnetism and Atmospheric Electricity, Baltimore Md,* **44**, 1939, p.411. Briefly, a figure is allotted, on a scale 0-9, to each 3-hour interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet-day variation. The figures are first allotted from the H magnetogram, and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure.

The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Lerwick is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	10	20	40	80	140	240	400	660	1000

Table I has been slightly changed in form from previous years owing to the omission of $(HR_H + VR_V)10^{-4}$. *K* figures, and their sums, have been given for each day in the main tables, but as it is considered that monthly means of *K* figures are not a good measure of activity, they are not included. Tables II, III, IV and V follow the pattern of previous years.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of				
	0 days	1 days	2 days	Lerwick	International
January	16	13	2	0·55	0·48
February	9	19	0	0·68	0·51
March	11	16	4	0·77	0·69
April	12	17	1	0·63	0·55
May	15	16	0	0·52	0·41
June	15	15	0	0·50	0·31
July	13	17	1	0·61	0·44
August	14	15	2	0·61	0·39
September	13	15	2	0·63	0·42
October	11	17	3	0·74	0·53
November	17	12	1	0·47	0·34
December	13	17	1	0·61	0·60
Year					
1945	159	189	17	0·61	0·47
1944	162	189	15	0·60	0·52
1943	145	199	21	0·66	0·68
1942	146	194	25	0·67	0·64
1941	172	169	24	0·60	0·73
1940	178	162	26	0·59	0·72
1939	186	143	36	0·59	0·77
1938	180	133	52	0·65	0·76
1937	119	197	49	0·81	0·73
1936	133	206	27	0·71	0·65
1935	100	245	20	0·78	0·67

TABLE II - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1945			Mean 1932-42			1945			Mean 1932-42		
	H	D	V	H	D	V	H	D	V	H	D	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	85	87	89	94	96	96	92	96	93	65	92	80
February	61	89	86	110	106	114	59	98	90	76	102	95
March	153	127	160	196	138	165	148	140	167	136	133	137
April	131	102	125	206	123	160	127	112	130	143	118	133
May	92	84	84	181	103	129	89	92	88	126	99	107
June	82	65	55	135	88	100	80	71	57	94	84	83
July	105	87	86	153	90	107	102	96	90	106	86	89
August	94	79	83	151	98	108	91	87	87	105	94	90
September	109	84	93	159	114	138	106	92	97	111	110	115
October	150	117	132	160	119	141	146	129	138	111	114	117
November	48	65	61	93	92	99	47	71	64	65	88	82
December	113	100	101	85	87	88	110	110	105	59	84	73
Winter	77	85	84	96	95	100	75	93	88	67	91	83
Equinox	136	107	127	180	124	151	132	118	132	125	119	126
Summer	93	79	77	155	95	111	90	87	80	108	91	92
Year	103	91	96	144	104	120	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III - FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1945			Percentage distribution					
				H		D		V	
	H	D	V	1945	1932-42	1945	1932-42	1945	1932-42
γ				%	%	%	%	%	%
0 - 9	0	0	5	0·0	0·0	0·0	0·0	1·4	0·5
10 - 19	9	3	38	2·5	1·8	0·8	0·5	10·4	8·2
20 - 29	28	14	51	7·7	5·2	3·8	2·6	14·0	12·2
30 - 39	21	22	44	5·8	7·4	6·0	4·8	12·1	9·9
40 - 49	41	34	28	11·2	7·7	9·3	8·6	7·7	7·4
50 - 59	51	52	20	14·0	10·3	14·3	11·3	5·5	6·0
60 - 69	36	47	23	9·9	10·2	12·9	13·9	6·3	5·2
70 - 79	35	45	6	9·6	9·7	12·3	9·8	1·6	4·8
80 - 89	29	28	18	7·9	7·8	7·7	9·2	4·9	3·8
90 - 99	21	15	10	5·8	5·6	4·1	6·5	2·7	3·3
100 - 109	12	17	11	3·3	4·1	4·7	4·8	3·0	3·6
110 - 119	10	12	11	2·7	2·9	3·3	3·6	3·0	2·7
120 - 129	7	14	12	1·9	2·6	3·8	3·4	3·3	2·5
130 - 139	6	6	14	1·6	1·7	1·6	3·3	3·8	2·2
140 - 149	6	12	9	1·6	2·1	3·3	3·0	2·5	2·2
150 - 159	8	3	7	2·2	1·3	0·8	1·6	1·9	1·9
160 - 169	3	8	4	0·8	1·5	2·2	1·5	1·1	1·8
170 - 179	1	3	2	0·3	1·0	0·8	1·4	0·5	1·1
180 - 189	5	7	5	1·4	0·9	1·9	1·2	1·4	1·5
190 - 199	2	2	1	0·5	1·0	0·5	0·9	0·3	1·5
200 +	34	21	46	9·3	15·2	5·8	8·0	12·6	17·8
Days omitted	0	0	0	..	..	..	..	..	..

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-42
WITH 1945 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		V	H	D	V	H	D	V	H	D
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-42	47·5	46·7	9·04	9·3	36·5	8·30	118·9	117·1	13·55
	1945(%)	80	79	91	102	93	97	92	53	92
Winter	1932-42	38·0	23·4	7·60	7·3	14·7	4·32	110·2	79·3	12·83
	1945(%)	76	66	83	66	78	100	80	64	87
Equinox	1932-42	60·0	54·3	10·60	11·6	41·4	9·25	150·3	167·2	18·61
	1945(%)	90	74	90	91	93	101	108	61	87
Summer	1932-42	47·6	69·7	12·38	15·6	55·8	12·14	124·3	140·3	14·59
	1945(%)	68	82	98	96	91	91	88	50	94

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE V - RATIO OF RANGE OF INEQUALITY AT LERWICK TO THAT AT ESKDALEMUIR 1945

Type of day	Element	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	1·04	1·16	1·03	1·03	1·09	1·13	1·18	1·08	1·07	1·00	0·98	1·01
d	D	1·38	1·25	1·28	1·00	1·12	1·18	1·29	1·40	1·16	1·36	1·47	1·35
q	H	0·86	0·97	0·98	1·15	1·27	1·19	1·12	1·14	1·02	0·93	0·93	1·01
d	H	4·44	0·88	2·84	1·39	1·35	1·32	1·58	1·80	2·13	3·60	0·69	2·89
q	V	1·38	1·38	1·23	0·83	0·79	0·80	0·65	0·81	0·83	0·92	0·57	1·00
d	V	1·53	2·24	2·04	2·46	1·86	1·82	2·05	2·16	1·85	1·91	2·07	1·89

Magnetic disturbances.- Particulars of the principal magnetic disturbances recorded at Lerwick during the year are given in Table VI. In the Eskdalemuir Section will be found a similar list which deals with the same disturbances as recorded at that Observatory. Within the limit of accuracy of measurement and registration "sudden commencements" appear to occur simultaneously at the two Observatories.

TABLE VI - PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT LERWICK, 1945

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1	Jan. 9 20	Jan. 10 21	410	9 22 48	86	10 0 25	324	50·6	10 6 56	−8·8	9 22 36	59·4	997	10 12 43	742	10 0 34	255
2	Jan. 15 2	Jan. 16 5	984	15 16 43	322	15 11 28	662	66·5	15 16 47	4·4	15 16 59	62·1	1219	15 16 42	879	16 1 25	340
3†	Jan. 28 17	Jan. 30 23	416	29 5 38	−39	29 4 20	455	44·6	29 5 55	−26·5	29 4 24	71·1	†1058	29 17 16	644	29 4 24	414
4	Feb. 26 14	Feb. 28 4	450	27 19 23	298	27 19 48	152	54·1	27 19 40	−6·0	26 18 21	60·1	1062	26 18 30	836	27 19 38	226
5	Mar. 10 23	Mar. 13 3	674	12 17 19	6	12 22 6	668	67·1	12 19 36	−39·3	12 21 26	106·4	1175	12 17 19	687	12 22 18	488
6	Mar. 14 12	Mar. 17 4	470	15 17 15	−147	15 2 21	617	65·4	15 22 9	−43·6	15 2 4	109·0	1120	15 17 42	576	15 2 13	544
7	Mar. 25 12	Mar. 28 21	497	26 16 10	239	28 11 17	258	58·5	25 23 54	−6·0	26 19 18	64·5	1148	26 16 22	733	26 0 14	415
8*	Apr. 1 4 59	Apr. 2 20	571	1 12 57	214	2 2 6	357	49·5	1 12 44	9·8	1 21 41	39·7	1133	1 14 30	766	2 2 8	367
9	Apr. 5 15	Apr. 9 6	538	5 20 15	−117	5 20 38	655	85·3	5 20 37	−1·8	6 17 29	87·1	1075	6 17 29	622	5 20 35	453
10*	Apr. 11 7 27	Apr. 15 4	480	11 14 47	94	12 1 50	386	50·9	11 12 40	5·3	14 22 28	45·6	1103	11 13 11	713	11 22 18	390
11*	May 9 8 2	May 12 7	475	11 16 8	307	12 3 55	168	43·6	11 14 4	−0·8	10 21 56	44·4	1106	11 16 20	875	10 22 36	231
12*	June 30 3 26	July 2 6	484	30 16 22	136	2 0 47	348	44·2	1 13 51	−0·7	2 1 42	44·9	1106	1 18 12	701	1 3 32	405
13	Aug. 28 1	Aug. 28 22	433	28 16 44	10	28 3 17	423	35·4	28 13 30	−43·2	28 3 19	78·6	1021	28 16 44	466	28 3 39	555
14	Sept. 16 23	Sept. 19 4	766	18 16 42	11	19 0 35	755	45·8	18 2 50	−14·1	18 21 49	59·9	1259	18 15 57	619	18 21 37	640
15	Oct. 12 6	Oct. 13 4	575	12 14 1	243	12 23 26	332	44·5	12 13 37	1·0	12 18 14	43·5	1148	12 17 59	820	12 23 53	328
16	Oct. 23 23	Oct. 26 5	578	24 19 37	−77	24 23 50	655	43·9	25 14 16	−42·8	25 1 51	86·7	1163	25 17 20	621	25 1 46	542
17	Oct. 27 11	Oct. 29 3	451	28 20 7	−359	28 0 47	810	84·6	28 1 4	−44·5	28 1 40	129·1	1059	28 0 58	593	27 23 44	466
18	Nov. 8 11	Nov. 10 15	441	8 18 22	208	9 7 17	233	56·3	9 7 17	−3·7	8 20 53	60·0	1116	9 16 32	814	9 3 12	302
19*	Dec. 13 12 38	Dec. 14 24	772	14 14 4	−67	14 1 52	839	51·3	14 6 34	−44·4	14 1 40	95·7	1133	14 15 3	654	14 7 0	479
20*	Dec. 19 18 11	Dec. 21 16	651	19 22 57	200	21 3 2	451	46·7	20 19 2	−8·0	19 23 38	54·7	1129	20 19 22	848	19 23 9	281

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk(*), and the time entered in the second column is that of the "sudden commencement" estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added: H, 14000γ; D, 11°; V, 46000γ.

REMARKS ON THE AUTOGRAPHIC RECORDS 1945

The Lerwick mean character figure for the month is shown in brackets after the name of the month.

JANUARY (average character figure 0·55).- Minor disturbance characterised the first few days of the month but this soon died away and from 5d. to 9d.21h. conditions were quiet or almost so. Activity then increased sharply and prominent bays occurred in H and V but by 10d.20h. quiet conditions were restored.

Quiet or only mildly disturbed conditions prevailed until 15d.15h. when again activity increased sharply. H rose to three peaks some 300γ or 500γ high at 15h.46m., 16h.42m. and 18h.15m. respectively, returning to normal values between each peak and calmed by 20h. V formed a broad peak during this period with a maximum of 47219γ and D meanwhile executed a number of sharp oscillatory variations but did not depart greatly from normal values.

Activity was renewed again around midnight of 16d. to 17d. but conditions remained otherwise only mildly disturbed or quiet until late on 28d. when a minor storm broke. All three elements formed broad bays with sundry minor minima and returned for a time to approximately normal values by 29d.8h. but there was moderate activity again on the evening of 29th. Ranges were 455γ, 1° 11′ and 414γ for H, D and V respectively. The record of V from 29d.17h.16m. to 30d.9h.34m. was lost, however, and the highest and lowest recorded values of 47058γ at 29d.17h.16m. and 46644γ at 29d.4h.24m. may not be the true maximum and minimum. Only mildly disturbed conditions prevailed for the remainder of the month.

FEBRUARY (average character figure 0·68).- The month opened with calm conditions but minor disturbance developed during 2d. and mild activity predominated to 14d. The scale of disturbance then increased a little and the midnight bays, particularly of V were enlarged on 14d.-15d. and 15d.-16d. By 18d. the level of activity had fallen and only mild disturbance remained. Calm or only mildly disturbed conditions continued to 25d. when minor bays formed on D and V between 0h. and 3h. and a prominent trough on D coupled with a smaller peak on V occurred between 20h. and 21h.

Moderate activity again developed on the evening of 26d., subsided early on 27d. and reappeared for a few hours in the evening. Almost quiet conditions were restored by the end of the month.

MARCH (average character figure 0·77).- Calm conditions on 1d. gave place to very mild disturbance on 2d. The level of disturbance continued low to 5d.15h. when it increased to moderate intensity. H and V formed appreciable peaks between 17h. and 20h. and D formed a trough between 20h. and 22h. Active disturbance reappeared on the following evening 6d., died out on 7d. and was renewed on a decreased scale on 8d. The 9d. and 10d. were calm except for minor activity in the evening of 9d.

Fresh disturbance developed sharply soon after 10d.23h. Prominent double bays occurred on H and D together with a single bay on V and at 18h. both H and D formed well marked peaks, that of H being about 250γ high. Almost normal conditions were restored by 20h. but activity was again renewed at 12d.10h. and a minor storm quickly developed. Each element rose erratically to maxima reached between 17h. and 18h. and then fell even more erratically through subsidiary minima to their main minima reached between 22h. and 23h. All elements returned to normal values and calm conditions by 13d.3h. Ranges were 668γ, 1° 46·4′ and 488γ on H, D and V respectively.

The calm conditions did not reign long· marked activity was renewed in the evening of 14d. and bays approximately 480γ, 1° 5·0′ and 320γ deep were formed on H, D and V respectively between 0h. and 5h. on 15d. The traces thereafter remained highly serrated, the elements returned to their normal values and a further storm was evident by 15d.17h. Preliminary peaks were not markedly developed but activity became vigorous about 21h. Deep bays, upon which wild oscillations were frequent then formed on H and V whilst D fluctuated rapidly. By 16d.2h. major activity was over and elements had almost regained normal values. Ranges were H 617γ, D 1° 49·0′ and V 544γ.

Moderate disturbance prevailed on 16d. but activity gradually decreased from day-to-day and 20d. was almost calm. Moderate bays formed quite sharply on all elements about 20d.20h. but quiet conditions were restored by midnight. Minor peaks on H and V accompanied by a minor trough on D occurred between 18h. and 20h. on 21d. otherwise all elements remained calm until mild activity reappeared during 24d. This in turn gave way to marked disturbance just before midnight on 25d. and activity continued on a high level until the evening of 28d. By 30d. calm conditions were restored.

APRIL (average character figure 0·63).- The calm upon which March ended was quickly broken. A "sudden commencement" at 1d.4h.59m. brought a rapid increase in activity to moderate levels and there appeared some evidence of further onsets at 1d.10h.24m. and 1d.12h.32m. Preliminary minima were shallow but H, and to a lesser extent V, developed peaks during the afternoon, that of H being over 200γ high. These were followed by prominent troughs on H and V, accompanied by peaks on D which developed between 21h. and 22h. and again between 1h. and 4h. on 2d. The activity then subsided and only mild disturbance alternated with calm periods until 5d.

Further disturbance became apparent from 5d.15h. and 5d.20h. sharp oscillatory variations occurred on all elements. H rose 160γ to a maximum at 20h.13m., fell 650γ to a minimum 23 minutes later and returned through subsidiary minima to normal values by 22h. D fell to a shallow minimum, rose rapidly 1° 30·0′ to its maximum at 20h.37m. and then fell away equally rapidly to oscillate about normal values. V fell sharply 400γ to a minimum at 20h.35m., rose almost immediately to its previous value and then fell away into an irregular shallow bay before returning to normal by 23h. Disturbance was quite marked and night bays enlarged for the next two days but activity subsided early on 9d., and 10d. was almost quiet.

Activity returned to a high level with a "sudden commencement" at 11d.7h.27m. and continued to be marked with prominent night bays for four days before decreasing on 15d. to only mild proportions. Quiet or only mildly disturbed conditions persisted to 22d. when minor disturbance developed only to die away again on 24d. Quiet conditions were re-established on 25d. and reigned to 30d. when mild disturbance reappeared.

MAY (average character figure 0·52).- Minor mild disturbance was apparent from 1d. to 3d. and alternated with calm periods to 9d.

A "sudden commencement" at 9d.8h.2m. followed by a further sudden onset at 9d.12h.52m. brought renewed disturbance of moderate intensity which lasted five days before dying away on 15d. to a minor level.

Minor mild disturbance predominated throughout the remainder of the month although activity increased slightly from 29d. to 31d.

JUNE (average character figure 0·50).- Calm prevailed at the beginning of the month and a small "sudden commencement" at 4d.12h.59m. failed to break the spell. Activity gradually increased on 6d., serrations became prominent and minor disturbance of moderate intensity persisted to 12d. before dying away. Quiet or only mildly disturbed conditions then returned and continued to 30d.

A "sudden commencement" at 30d.3h.26m. followed by a further sudden onset at 30d.12h.10m. broke the calm spell and brought a return of moderate disturbance.

JULY (average character figure 0·61).- The moderate disturbance which began on 30d. of June was active on 1d.; afternoon maxima and night bays were enlarged on all elements. Ranges were H 348γ, D 45·0′ and V 405γ.

The activity decreased appreciably on 2d. but continued on a minor level to 6d. which was marked by moderate bays on H and V accompanied by a peak on D between 5h. and 11h. Moderate disturbance persisted to 9d. before dying away and the period 9d. to 15d. was quiet or almost so.

Minor disturbance reappeared from 16d. to 19d., the period 19d. to 22d. was quiet and moderate activity on 23d. soon subsided. Calm or only mildly disturbed conditions followed until early on 28d., when serrations began to appear. Disturbance slowly grew to moderate activity through the night of 29-30d. but then declined gradually and left 31d. almost calm.

AUGUST (average character figure 0·61).- Only very slight disturbance was evident on 1d. but from 0h. to 6h. on 2d. night bays were much enlarged, that of V being some 240γ deep. Minor activity subsequently characterised the traces to 8d., and the period 9d. to 13d. was quiet or only slightly disturbed. Further minor activity then developed and night bays were slightly enlarged to 16d. before calm conditions became re-established.

Mild activity on 21d. and enhanced evening maxima on 22d. followed by slightly enlarged night bays were the only features of the period 17d. to 27d., during which traces were either quiet or only very mildly disturbed. The calm was quickly shattered on 28d., however, when all elements began to form troughs at 1h., which reached minima between 3h. and 4h. of depths some 375γ in H, 40·0′ in D and 500γ in V, before returning to normal values about 6h. Traces remained highly serrated and minor disturbance was evident throughout 28d. but the activity soon died away and the closing days of the month were almost calm.

SEPTEMBER (average character figure 0·63).- The quiet spell noted at the end of August continued to 4d. September when minor disturbance appeared. This disturbance soon decreased and traces remained calm or only mildly disturbed until 11d., when enhanced evening maxima and enlarged night minima were formed in H and V. Minor disturbance occurred over 12d. and 13d. but calm conditions were restored from 14d. to 16d.

The most extensive disturbance of the month began about 16d.23h. with enlarged night bays. Activity continued to be marked throughout that day and increased to storm proportions about 18d.13h. Both H and V formed pronounced triple peaks with maxima of 14724γ at 16h.46m. and 47256γ at 15h.57m. respectively before falling into extensive multiple bays with minima at 19d.0h.35m. and 18d.21h.37m. respectively. D meanwhile executed numerous oscillations. Ranges for the storm were H 755γ, D 1° 0′ and V 640γ, all elements returned to normal by 19d.4h.

Minor mild activity followed for several days, the 23d. was calm, and quiet or only mildly disturbed conditions prevailed throughout the remainder of the month.

OCTOBER (average character figure 0·74).- Minor activity was evident on 1d. and D formed a small peak between 20h. and 22h. Calm or only mildly disturbed traces prevailed, however, during the opening week with the exception of a slight hump on V during the evening of 5d.

All elements formed enlarged bays on the evening of 7d. but recovered by 8d.2h. and minor disturbance soon faded out. The 10d. and 11d. were almost perfectly calm.

Active disturbance reappeared on 12d.; H and V formed prominent maxima about 14h., again about 18h. and subsequent well marked minima about midnight. D followed a more irregular course, of which the chief feature was a bay at 18h. Ranges were H 332γ, D 43·0′ and V 328γ.

Moderate disturbance continued active at intervals during the evenings and nights of the next eleven days, chief activity of this period being on the night of 19d.-20d.

Activity again increased to storm proportions on 24d. Serration became marked on all elements and there was the usual extensive evening peaks and midnight troughs on H and V. D formed a broad bay throughout upon which subsidiary oscillations were superposed. All elements quietened considerably by 25d.6h. but further marked activity took place during the evening and the maximum value of V for the month occurred at 25d.17h.20m. Ranges were H 655γ, D 1° 27·0′ and V 542γ. A day of almost calm followed, but a "sudden commencement" at 26d.21h.4m. heralded a further storm which broke almost 24 hours later.

The storm took the form of deep bays on all elements upon which intense fluctuations and many subsidiary minima were superposed. Absolute minima of 13643γ at 28d.0h.47m. on H, 10° 15·7′ at 28d.1h.40m. on D, and 46593γ at 27d.23h.44m. on V were recorded to give total ranges of 810γ, 2° 9·0′ and 466γ for H, D and V respectively while some of the subsidiary fluctuations exceeded 400γ in 10 minutes. Elements recovered normal values about 28d.7h. but marked activity continued throughout the day, the maximum for H being recorded at 28d.20h.7m. and minor disturbance on a decreasing scale characterised the remainder of the month.

NOVEMBER (average character figure 0·47).- The month opened quietly and traces were only slightly disturbed until a "sudden commencement" at 4d.13h.0m. brought moderate activity in its train. This resulted in enhanced evening maxima and night bays, but by 5d.6h. traces were quiet again. Small serrations were evident about noon on succeeding days, otherwise calm prevailed to noon on 8d.

Quite vigorous disturbance developed about 8d.17h. and a number of irregular peaks and troughs formed on all elements during the next thirty hours before activity fell to moderate levels. Absolute ranges for this period were H 233γ, D 1° 0′ and V 302γ. All traces continued to be moderately disturbed until 14d. and a number of shallow troughs were formed during this period.

The 14d. and 15d. were only mildly disturbed but moderate activity returned on 16d. to enlarge night bays before fading once more on 17d. The remainder of the month was almost entirely calm with the exception of a trough 30′ deep on D accompanied by minor peaks on H and V between 19h. and 21h. on 29d.

DECEMBER (average character figure 0·61).- The calm spell noted in November continued to the evening of 5d. with the exception of a small trough on D about 2d.23h. Minor disturbance reappeared late on 5d, however, and night bays were slightly enlarged to 9d. Calm was restored from 10d. but was abruptly broken by a "sudden commencement" at 13d.12h.38m. Activity increased rapidly about six hours later and a storm quickly developed.

All elements rose to maxima of 14619γ, 11° 44·1′ and 47111γ on H, D and V, reached about 13d.20h.20m., and then fell irregularly through subsidiary minima and maxima to reach absolute minima of 13933γ at 14d.1h.52m. on H, 10° 15·7′ at 14d.1h.40m. on D and 46654γ on 14d.7h.0m. on V before returning tortuously to further peaks of 14772γ, 11° 51·0′ and 47133γ reached about 14d.14h.4m., 14d.6h.34m. and 14d.15h.3m. respectively. Activity then subsided and all elements regained normal values by 14d.18h.

Minor disturbance and enlarged night bays prevailed to 19d. when at 18h.11m. a well marked "sudden commencement" was recorded followed by a sharp increase in activity about 22h. All elements formed moderate troughs upon the base of which H and D formed towering pinnacles about 330γ and 49·0′ high respectively. Traces returned to approximately normal values soon after midnight but serration continued to be marked and evening maxima on 20d. followed by minima early on 21d. were well developed.

The 22d. was calm but another well marked "sudden commencement" at 23d.16h.16m. led to further activity chiefly characterised by serrated maxima on H and V between 20h. and 24h., and oscillations on D between 20h. and 21h. Evening maxima and night bays were well developed on the night of 25d. to 26d. and activity continued at a moderately high level to 30d.; a trough about 45·0′ deep on D being the most prominent feature of the period. The closing days of the year were quiet.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

1 LERWICK 1945

	JANUARY, factor 1·22				FEBRUARY, factor 1·20				MARCH, factor 1·16			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	153	124	-	-	114	165	319	122	104	<45	410	119
2	-	-	-211	173	130	503	16	424	33	48	108	100
3	91	120	182	178	55	110	161	110	108	145	272	-
4	21	626	165	111	-67	<-1725	55	153	45	59	137	119
5	325	119	181	78	129	309	203	168	67	82	56	100
6	370	127	144	329	47	133	148	125	45	130	115	52
7	115	214	210	242	-390	199	-	-	70	148	-148	104
8	377	139	-62	308	101	144	198	432	59	78	122	118
9	533	82	258	283	241	4	-	54	89	-	96	78
10	70	160	311	-	-410	-128	-70	290	81	44	115	144
11	-	-	-	135	54	166	112	217	81	81	103	122
12	49	73	138	102	158	270	-	-	140	225	52	114
13	73	118	236	155	-	-	-	-	92	177	52	203
14	183	77	114	134	-	-	-	-	33	103	122	96
15	85	121	186	-	-	-	-	-	114	166	89	137
16	24	-	234	646	-	-	-	4	114	70	111	111
17	170	307	117	198	298	504	237	409	103	118	114	-44
18	129	278	294	326	488	103	179	156	-683	173	959	129
19	73	105	69	157	202	183	480	373	-	-	332	-63
20	101	764	490	462	-296	-11	42	65	41	-114	129	74
21	88	152	112	273	57	53	95	95	52	89	78	78
22	740	124	196	380	113	174	-	193	37	118	-	403
23	116	88	800	820	113	75	83	158	363	440	818	932
24	136	116	92	184	102	117	132	-45	479	360	326	594
25	127	107	167	207	86	263	117	124	297	449	371	352
26	76	135	219	191	71	120	375	154	93	108	48	112
27	-556	0	242	91	60	109	-	-	108	179	286	123
28	254	151	119	210	-	-	30	60	45	90	108	101
29	40	71	154	-					90	101	325	-288
30	87	616	-20	-119					-187	101	443	487
31	307	134	264	292					-56	60	83	-1211
(a)	175	187	219	256	138	185	166	185	110	142	220	196
(b)	166	199	197	233	71	60	160	196	68	134	205	114
Mean	(a) 209		(b) 199		(a) 169		(b) 122		(a) 167		(b) 130	

	APRIL, factor 1·21				MAY, factor 1·20				JUNE, factor 1·23			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	90	(229)	327	350	86	94	98	39	247	450	389	462
2	309	185	-	445	75	24	122	157	247	243	259	328
3	72	41	102	287	94	-362	118	193	248	321	430	402
4	60	83	-945	283	114	-334	287	157	187	313	89	106
5	129	80	-61	72	24	229	169	232	90	118	122	122
6	144	186	171	179	158	91	110	154	122	122	-334	374
7	217	95	129	251	162	181	165	162	151	175	159	412
8	206	320	236	236	83	75	87	20	82	253	-	82
9	103	157	271	256	0	201	63	395	33	122	-69	143
10	-95	164	160	202	126	190	-	249	20	98	123	61
11	107	103	146	149	-	-	115	130	127	151	241	131
12	115	81	108	38	36	158	289	285	205	148	103	119
13	-399	104	127	169	166	396	-467	269	-82	119	4	164
14	104	158	200	-674	79	187	75	155	41	61	95	123
15	112	450	223	293	79	87	-	167	-719	119	82	78
16	382	205	289	139	127	139	135	135	70	49	87	82
17	112	216	235	-31	99	91	115	155	82	99	-354	206
18	128	143	155	129	103	107	159	131	157	169	322	194
19	104	120	7	186	199	116	148	156	128	107	202	479
20	0	113	116	124	132	160	211	275	302	99	170	120
21	151	97	140	101	120	132	132	212	83	248	207	253
22	31	89	113	148	108	124	188	196	170	91	581	195
23	117	82	89	86	144	148	132	136	237	328	257	137
24	47	8	51	121	80	112	148	108	394	652	71	95
25	78	82	109	133	96	116	144	144	116	162	158	233
26	78	117	121	129	96	141	-1045	8	166	183	108	125
27	121	461	-	-102	157	205	225	201	83	42	138	121
28	102	121	207	160	97	129	165	197	96	96	38	121
29	321	168	223	211	189	157	129	137	117	84	92	125
30	212	82	114	133	113	61	267	194	138	134	163	167
31					129	364	574	-				
(a)	134	151	160	186	119	142	161	185	148	179	180	192
(b)	101	139	113	138	120	107	98	185	112	176	136	196
Mean	(a) 158		(b) 123		(a) 152		(b) 127		(a) 175		(b) 155	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 1·30				AUGUST, factor 1·38				SEPTEMBER, factor 1·36			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	<-481	222	117	100	-	166	115	251	90	133	86	172
2	88	113	113	155	228	132	161	89	86	168	306	211
3	84	113	126	205	217	463	289	472	500	168	233	461
4	163	394	432	784	718	901	297	85	212	95	108	125
5	575	752	659	134	85	127	115	166	65	143	112	177
6	286	533	-	<-130	107	85	38	85	82	112	177	298
7	164	626	223	164	158	141	124	260	178	212	139	212
8	185	211	135	193	273	183	285	298	100	82	82	134
9	211	(189)	126	257	260	294	341	490	48	82	113	204
10	126	(-105)	206	232	162	439	68	226	122	143	-	-
11	253	84	97	80	124	209	170	371	-	-	78	182
12	42	667	300	165	158	137	128	128	378	143	178	642
13	93	118	177	207	137	167	128	175	91	225	204	498
14	148	59	181	0	248	209	363	252	312	304	<-169	191
15	893	635	190	233	184	154	184	167	39	117	95	65
16	220	173	343	123	98	124	346	465	126	122	139	-
17	42	127	140	300	496	334	120	218	78	117	130	122
18	305	592	571	635	124	133	124	124	43	126	126	165
19	503	211	165	127	60	86	120	90	87	56	100	-143
20	461	338	178	474	47	81	98	103	86	143	216	307
21	254	640	127	204	47	73	98	158	670	143	222	497
22	178	131	98	199	47	77	51	81	315	-427	155	34
23	76	114	220	161	43	47	133	317	56	151	133	163
24	144	157	89	144	188	295	103	<-484	82	73	129	163
25	136	<-637	132	157	-111	141	133	120	-4	206	167	172
26	132	179	127	140	73	124	145	321	94	257	133	137
27	174	157	149	247	86	339	129	82	132	179	85	85
28	89	132	187	302	82	137	90	133	43	85	119	149
29	174	213	132	174	(-542)	305	30	125	81	93	255	174
30	119	242	81	161	107	173	90	189	127	170	89	165
31	127	251	179	-	90	133	138	189				
(a)	215	289	200	223	166	207	153	208	161	144	147	219
(b)	215	236	201	219	133	208	155	183	151	124	138	207
Mean	(a) 232		(b) 218		(a) 184		(b) 170		(a) 168		(b) 155	

	OCTOBER, factor 1·27				NOVEMBER, factor 1·17				DECEMBER, factor 1·07			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	355	127	127	203	78	118	169	431	108	219	208	205
2	76	63	76	152	109	117	148	199	132	147	140	168
3	168	219	168	295	218	152	183	148	239	146	-	-
4	-	273	-	290	97	54	116	120	43	-	139	110
5	67	205	122	159	163	221	279	232	490	497	639	628
6	130	121	121	209	116	151	232	154	74	149	227	117
7	163	129	138	83	193	-312	81	146	134	102	-	81
8	108	208	-	154	115	92	96	111	6	39	53	-204
9	120	91	149	174	80	126	180	169	-81	74	282	-
10	95	120	174	124	107	111	145	172	67	91	137	102
11	0	83	-58	128	76	110	118	194	39	-	-	105
12	95	91	-	-	-15	-23	152	144	109	140	-45	-21
13	78	74	37	107	121	262	288	269	39	108	101	87
14	78	119	90	119	106	113	121	147	91	105	70	109
15	82	82	200	368	-536	147	121	139	56	73	91	171
16	192	131	188	265	-	-	-	-	140	126	-70	35
17	134	142	159	216	120	-	116	142	94	80	-255	175
18	227	268	329	520	78	97	231	183	192	216	119	297
19	239	644	567	154	-	-	134	119	220	185	-178	185
20	117	238	323	279	104	82	100	70	73	140	129	185
21	210	93	185	290	37	74	70	44	-349	87	195	318
22	764	322	141	245	48	107	89	81	164	133	98	126
23	188	172	357	437	125	70	<-228	151	-	-	147	108
24	224	248	288	152	103	-7	154	305	129	63	87	133
25	40	203	-	-	248	172	186	106	66	73	80	105
26	-	-	159	-	149	135	113	141	73	38	129	133
27	75	107	127	159	-	-	-	-	87	-178	-10	-569
28	119	143	174	131	-	-	-	-	-3	24	101	105
29	43	28	67	39	-	108	105	137	-14	73	105	91
30	4	189	299	193	104	108	97	47	87	14	150	115
31	157	177	322	110					136	171	115	73
(a)	150	170	196	206	117	123	147	159	119	123	154	156
(b)	158	167	187	204	89	99	135	154	91	113	97	115
Mean	(a) 181		(b) 179		(a) 137		(b) 119		(a) 138		(b) 104	

The factor used for converting the potential at the collector potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	146	170	175	198
(b)	123	147	152	179
	(a) 172		(b) 150	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																									v./m.
	0a days only*																									
Jan.	+3	-1	-13	-43	-61	-79	-78	-25	-45	-3	+29	-9	-37	-37	-1	+7	+15	+39	+75	+50	+94	+76	+31	+16	-119	2	156
Feb.	-28	-8	-45	-67	-55	-68	-61	-41	-15	+37	+125	+69	+55	+29	+67	+40	+63	+41	-9	-11	-27	-31	-33	-29	-36	1	189
Mar.	-18	-103	-165	-203	-220	-234	-234	-144	-73	-37	-113	-61	+25	+33	+95	+41	-31	+45	+157	+239	+313	+301	+255	+133	-96	3	451
Apr.	-6	-13	-18	-23	-17	-21	-17	-13	-25	-13	-21	-31	-13	+10	+11	+20	+29	+31	+26	+31	+23	+29	+21	+1	-47	2	111
May	+4	-1	-10	-14	-14	-18	-22	-19	-16	-22	-17	-16	-15	+6	+6	+19	+14	+28	+19	+24	+31	+21	+10	+1	-18	9	149
June	-20	-33	-45	-35	-28	-41	-58	-48	-37	-35	-39	-30	-7	+14	+23	0	+34	+72	+67	+64	+61	+64	+47	+10	-56	9	93
July	+33	+7	-30	-35	-11	-5	0	-1	-20	-5	-1	+8	+4	-14	-33	-25	-7	-18	-19	+25	+35	+33	+31	+46	+33	12	255
Aug.	0	+6	-5	+2	+19	+7	+19	+2	-22	-35	-25	-39	-3	-13	-17	-25	-26	-14	+8	+41	+24	+41	+55	-1	+33	13	204
Sept.	+2	-3	-9	-14	-29	-15	-14	-18	-14	-13	-18	-10	-12	-15	-11	+4	+12	+8	+23	+43	+54	+41	+8	-1	-6	10	151
Oct.	-50	-48	-39	-33	-40	-29	-17	+17	+15	+1	-17	-14	+22	+45	+26	+41	+38	+57	+69	+42	+25	-42	-19	-36	-1	10	206
Nov.	-23	-45	-52	-61	-50	-49	-52	-30	-25	-17	0	-6	-25	+6	+16	+23	+25	+65	+96	+59	+45	+64	+15	+21	+13	8	155
Dec.	-21	+8	+30	+24	+15	+16	+11	+5	+6	+17	+29	+23	-35	-30	-22	-21	-24	-23	-3	+9	+13	-4	-17	-16	-28	1	123
Year	-10	-20	-34	-42	-40	-45	-44	-27	-23	-10	-6	-10	+4	+2	+13	+10	+9	+28	+43	+52	+58	+49	+34	+12	-26	80	195
Winter	-17	-12	-20	-37	-38	-45	-45	-23	-20	+9	+46	+19	+11	-8	+15	+12	+20	+31	+40	+29	+31	+26	-1	-2	-43	12	156
Equinox	-18	-42	-58	-68	-69	-75	-71	-42	-24	-16	-42	-29	+6	+18	+30	+27	+12	+35	+69	+89	+104	+82	+66	+24	-33	25	230
Summer	+4	-5	-23	-21	-13	-14	-15	-17	-24	-24	-21	-19	-5	-2	-5	-8	-4	+17	+19	+39	+38	+40	+36	+14	-2	43	200
	1a and 2a days only*																									
Jan.	+15	+13	-9	-33	-37	-37	-59	-41	-40	-34	-22	+37	-3	+9	+21	+45	+45	+13	+32	+25	+23	+17	+2	+16	-40	2	109
Feb.	+3	+12	+7	-41	-39	-49	-174	-163	-143	-110	-102	-47	+123	+75	+97	+28	+75	+17	+79	+119	+85	+93	+103	+11	-213	2	255
Mar.	-91	-120	-105	-109	-92	-118	-83	0	+45	-3	-19	-40	+23	+117	+66	-39	-1	+109	+101	+94	+175	+106	+54	-71	-16	9	81
Apr.	-53	-57	-25	-12	+15	+15	+48	+45	+33	+22	-4	-4	-14	-40	-24	+30	+4	+43	+28	+32	-21	-10	-10	-42	+52	8	177
May	-59	+25	+11	-31	+10	+32	+7	+40	-11	-5	-18	-24	-31	-29	+20	+1	+26	+4	+27	+57	+40	-5	-33	-54	+86	5	181
June	-8	-32	-21	-4	-20	-19	+35	+19	+27	+4	-24	-36	-22	+1	-4	-8	-16	-3	+19	+17	+19	+21	+30	+25	-20	5	133
July	+48	-13	-32	-25	-7	+18	+72	+74	+92	+47	+16	-8	-37	-57	-26	-68	-66	-66	-60	-42	-20	-39	+44	+38	-46	7	220
Aug.	+30	+7	-57	-71	-56	-3	+11	+6	+5	0	-14	-8	-23	-7	-15	-13	-5	+3	+41	+48	-52	+35	+12	+20	-81	8	121
Sept.	-8	-14	-42	-34	-29	-27	-1	+8	+12	+3	-5	-14	+9	+7	+26	+12	+21	+52	+57	+21	-1	-12	-18	-25	+31	8	117
Oct.	-44	-33	-47	-73	-49	-22	-49	-31	-6	-5	-4	+8	+7	+25	+51	+28	+54	+21	+51	+49	+48	+15	-8	+7	-65	8	129
Nov.	+14	-4	+3	-4	-7	+3	-10	-9	-13	-1	-8	-8	-8	-2	+1	+2	-5	+3	-7	+3	+15	+34	+3	+4	+45	7	102
Dec.	-14	-4	-3	-19	-18	-19	-2	-13	-11	+15	+9	+13	+26	+1	+11	+25	+21	+27	-1	-5	-25	-10	-5	+2	+53	7	105
Year	-16	-18	-27	-38	-27	-19	-17	-9	-1	-11	-16	-11	+8	+8	+19	+7	+13	+18	+31	+35	+33	+27	+15	-6	-18	76	144
Winter	+5	+3	-1	-24	-26	-26	-61	-57	-52	-48	-31	-1	+35	+21	+33	+25	+34	+15	+26	+36	+25	+34	+26	+8	-55	18	143
Equinox	-49	-56	-55	-57	-39	-38	-21	-6	+21	+4	-6	-13	+6	+27	+30	+8	+20	+56	+59	+49	+50	+25	+5	-33	+1	33	126
Summer	-3	-3	-25	-33	-18	+7	+31	+35	+28	+12	-10	-19	-18	-23	-6	-12	-15	-16	+7	+20	+23	+23	+13	+7	-15	25	164

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation of 0a, 1a, 2a days see p. 16. *Observatories' Year Book, 1938*

† See p. 10. *Observatories' Year Book, 1938*

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	(1b)	-	0a	···	2b	1·7	1c	0·7	1b	0·9	1b	0·7
2	(2c)	-	2c	5·4	1a	0·3	(1c)	-	1b	1·1	0a	···
3	1c	2·2	0b	···	1b	-	1c	2·4	1b	1·9	0a	···
4	1c	1·7	2b	6·3	1b	0·7	2c	4·3	2b	5·1	1a	0·1
5	1b	1·0	1b	1·6	2b	6·3	2b	4·5	1a	0·5	0a	···
6	1c	2·4	1b	2·0	1a	0·1	1a	0·7	0a	···	1b	3·0
7	1c	1·1	2c	-	1b	1·8	1a	0·1	0a	···	1b	0·9
8	1c	1·7	1b	1·1	1a	0·8	1a	0·1	1c	2·9	(1a)	-
9	1c	2·4	(1b)	-	1b	0·4	1b	0·5	2c	5·1	1b	3·0
10	(0a)	···	2c	17·1	1a	0·3	1b	0·8	(1a)	-	1b	0·8
11	(0a)	···	1b	0·6	1a	0·5	0a	···	(0a)	-	1b	1·6
12	1a	0·1	(0a)	-	1b	1·8	1b	3·0	1b	1·3	1a	0·1
13	(0a)	···			1a	0·1	1b	2·1	2b	3·8	2b	5·2
14	1a	0·4			1b	0·8	1b	1·9	1b	1·9	1a	0·6
15	(0a)	···			1b	1·2	1a	0·2	(1b)	-	2b	4·3
16	(1c)	-			1b	1·9	(0a)	···	1b	2·3	1b	2·1
17	1b	0·8	1b	1·7	1b	3·7	1a	1·2	1b	0·8	2b	3·4
18	1b	0·1	1a	0·1	2c	-	1a	0·4	0a	···	0a	···
19	1c	2·1	1a	0·2	(2c)	-	1a	0·5	0a	···	0a	···
20	1c	2·5	2b	-	1c	1·8	1b	1·2	0a	···	0a	···
21	1c	1·5	2b	3·8	1a	2·2	2c	3·2	0a	···	1a	0·1
22	1b	0·6	1c	1·1	(1b)	-	1a	0·9	0a	···	1b	0·4
23	1c	2·1	1c	2·5	0a	···	0a	···	0a	···	1b	0·4
24	1b	1·3	1b	2·3	0a	···	2b	6·5	1a	0·5	1b	0·7
25	0a	···	1c	1·1	0a	···	(1b)	-	1a	1·3	0a	···
26	1b	1·7	1c	1·6	1a	0·1	1c	1·7	2b	6·4	0a	···
27	1b	1·8	(1a)	-	2b	3·5	1c	1·3	1a	1·0	1a	0·1
28	0a	···	(1b)	-	1a	0·2	1c	2·6	1b	2·3	0a	···
29	(1b)	-			1b	2·9	1c	0·3	0a	···	1b	1·0
30	2c	7·2			1c	1·9	1b	0·3	1b	0·5	1b	1·7
31	1b	0·3			2c	9·8			1a	0·3		
Total	27	35·0	27	48·5	34	44·8	31	41·4	25	39·9	24	30·2
No. of days used	31	27	24	18	31	27	30	28	31	28	30	29
Mean	0·87	1·3	1·13	2·7	1·10	1·7	1·03	1·5	0·81	1·4	0·80	1·0

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	2·7	(0a)	-	0a	···	0a	···	0a	···	1a	0·5
2	0a	···	1a	0·6	0a	···	0a	···	0a	···	1a	0·1
3	0a	···	(1a)	-	0a	···	(0a)	···	0a	···	1b	-
4	0a	···	1b	0·2	0a	···	(0a)	-	1a	0·7	1b	-
5	1a	0·3	0a	···	0a	···	0a	···	1b	0·4	2c	4·7
6	(1b)	-	1a	1·1	1a	0·1	0a	···	1b	1·3	1b	0·4
7	1b	0·9	0a	···	0a	···	1b	0·5	2b	3·5	0a	···
8	0a	···	0a	···	0a	···	(1a)	-	1b	0·9	2a	5·4
9	(0a)	-	0a	···	0a	···	1a	1·5	0a	···	1b	-
10	2c	4·3	1a	0·2	(0a)	-	1b	1·2	0a	···	1b	3·0
11	2b	3·8	(0a)	-	(1a)	-	1b	1·7	1a	0·1	0a	···
12	1b	0·7	0a	···	1b	1·0	(1a)	-	2b	3·5	1b	-
13	0a	···	0a	···	1b	0·4	(1a)	-	0a	···	1b	0·3
14	2b	4·8	0a	···	1b	0·8	1a	0·3	0a	···	1b	1·0
15	1b	0·1	0a	···	1a	1·3	1b	1·7	1b	-	1a	0·9
16	0a	···	0a	···	(1a)	-	1a	0·3	-	-	2a	4·1
17	1a	0·5	0a	···	1b	0·9	0a	···	1b	-	2b	3·8
18	0a	···	0a	···	0a	···	0a	···	0a	···	1b	0·5
19	0a	···	1a	0·1	1a	2·5	0a	···	0a	···	2b	3·7
20	0a	···	1a	0·1	1b	0·2	0a	···	0a	···	1b	2·4
21	0a	···	1a	0·1	(1b)	-	1b	0·4	1a	0·9	1b	0·4
22	1a	0·1	(1a)	-	2b	4·7	2b	4·4	1a	0·1	0a	···
23	1b	0·7	(1b)	-	1b	1·1	1b	1·5	1b	2·0	1b	-
24	1a	0·1	(1b)	-	1a	0·5	1a	1·1	1a	0·6	1b	1·4
25	1b	0·7	1b	0·7	1a	0·5	(1b)	-	1b	2·3	1a	0·7
26	1a	0·3	1a	0·3	1a	0·3	(1b)	-	1a	0·1	1a	0·9
27	0a	···	1b	1·1	1b	1·5	1a	0·5	-	-	2c	10·6
28	0a	···	1b	2·6	1a	0·5	1a	0·2	-	-	2b	5·3
29	0a	···	2c	5·3	1a	0·4	1a	2·2	1b	-	1b	1·4
30	1a	0·3	0a	···	0a	···	1a	0·8	1a	0·3	1a	0·9
31	0a	···	0a	···			0a	···			1b	1·0
Total	19	20·3	17	12·4	20	16·7	21	18·3	19	16·7	35	53·4
No. of days used	31	29	31	25	30	26	31	25	27	24	31	26
Mean	0·61	0·7	0·55	0·5	0·67	0·6	0·68	0·7	0·70	0·7	1·13	2·1

Annual values: Character frequency 0 1 2 — No. of days used 99 198 39

Mean character figure 0·84 (336 days)

Duration: Total 377·6 hr. — No. of days 312 — Mean 1·21

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

4 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	364	369	372	372	376	373	380	384	381	371	354	359	373	377	372	364	372	373	364	366	382	362	361	353	370
2	341	361	363	377	384	385	381	380	379	374	372	372	368	368	368	363	364	370	374	372	369	376	379	372	371
3	373	369	372	376	378	378	378	377	383	378	363	370	372	377	375	372	377	377	369	373	371	378	380	377	375
4	376	376	377	378	380	382	381	381	379	380	381	381	381	383	381	378	376	366	363	356	343	363	367	363	374
5	367	372	365	364	371	376	377	378	376	371	373	375	375	373	369	372	375	377	376	373	375	377	376	377	373
6	375	370	372	376	381	386	384	388	386	383	373	374	378	375	373	377	377	378	381	381	382	376	377	381	379
7	374	373	372	372	381	385	386	389	385	382	380	375	377	380	383	381	381	383	380	381	378	374	382	378	380
8	371	372	374	375	380	385	385	383	379	379	376	376	380	382	377	377	376	378	373	374	375	378	378	380	378
9	379	378	376	377	378	380	381	377	375	378	382	381	385	385	385	383	384	385	389	385	384	374	354	310	377
10 d	235	309	366	370	369	373	344	344	349	355	356	360	349	360	363	371	367	366	371	369	368	372	372	372	355
11 q	372	374	372	372	374	375	375	375	370	369	367	366	368	372	373	372	373	375	374	373	372	370	372	376	372
12	371	372	375	378	382	384	384	383	383	379	374	374	376	381	373	372	369	372	374	370	369	366	372	373	375
13	362	381	369	362	377	394	394	384	380	377	371	369	368	371	376	379	382	383	383	383	384	384	383	383	378
14	382	381	383	382	383	384	385	382	383	378	374	372	378	384	386	387	387	387	387	386	384	386	387	387	383
15 d	386	382	383	388	384	385	401	373	354	359	344	341	344	374	373	431	501	403	587	368	353	363	356	355	*387*
16	351	341	347	354	358	365	355	364	369	362	355	364	366	371	372	374	376	375	375	373	369	363	314	334	360
17 d	323	334	335	338	370	372	375	375	380	374	353	362	371	374	372	376	377	376	377	369	367	370	375	376	365
18	376	374	372	371	373	375	377	377	379	377	374	372	372	377	381	384	385	384	381	381	384	387	379	367	377
19	370	375	368	371	386	379	380	378	381	383	381	376	370	377	383	382	379	372	372	366	366	377	380	373	376
20	373	374	372	375	373	392	388	388	380	369	365	360	365	377	380	381	378	382	380	381	380	378	377	376	377
21	378	376	375	374	372	377	381	379	378	377	373	375	375	372	375	372	372	375	377	376	379	379	394	376	377
22	373	377	376	376	375	375	378	381	381	376	375	375	376	381	382	381	384	381	380	381	381	384	373	375	378
23 q	374	373	375	378	377	381	381	381	378	377	380	381	381	381	381	380	381	383	382	379	377	373	378	377	379
24 q	378	376	377	378	378	379	380	380	378	376	377	378	381	384	384	385	386	386	385	385	382	381	379	379	381
25 q	380	378	379	381	381	380	378	376	374	371	369	372	377	382	386	385	385	385	385	386	385	386	384	382	380
26	378	381	382	385	387	386	385	385	386	388	391	395	398	395	397	390	390	383	378	381	377	371	372	375	385
27	377	372	372	381	385	383	384	383	381	376	373	372	377	378	384	384	381	384	385	387	384	385	386	386	381
28 d	383	382	384	386	389	390	390	387	381	378	380	382	384	387	386	386	386	381	394	385	382	369	372	273	379
29 d	242	277	215	185	155	344	359	336	347	359	351	351	361	373	380	382	393	384	381	369	334	333	343	318	*328*
30	356	363	364	365	341	340	375	371	369	357	354	355	353	354	357	368	360	365	372	372	370	370	373	374	362
31 q	372	369	371	369	373	376	378	378	375	367	366	364	365	368	372	373	377	377	380	379	370	373	365	371	372
Mean	*362*	366	366	367	369	378	379	377	376	374	370	370	372	377	377	379	382	379	*385*	376	374	373	372	366	374

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −7γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

5 LERWICK (D) — 11° + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	29·0	32·4	33·5	34·3	34·4	35·4	35·3	35·3	35·3	35·4	35·9	36·7	37·2	37·4	37·1	35·7	35·6	37·1	33·8	32·5	23·5	31·3	30·7	30·9	34·0
2	37·5	31·7	27·1	27·7	33·7	36·1	36·5	38·7	37·0	37·3	36·9	37·2	38·3	37·9	36·2	33·4	31·9	35·3	35·3	33·1	32·8	32·0	33·8	34·4	34·7
3	35·4	35·2	35·7	35·2	35·0	34·8	35·0	34·8	35·6	37·0	38·2	39·4	38·5	37·8	37·6	34·1	34·5	36·6	29·4	25·0	33·7	35·3	34·8	34·7	35·0
4	34·6	34·7	34·7	34·8	34·8	34·7	34·7	34·7	35·2	36·2	37·0	37·2	37·0	36·3	35·3	35·5	37·2	33·5	36·9	34·5	28·7	21·5	30·5	32·4	34·3
5	34·3	30·9	31·8	32·3	30·6	31·6	33·6	35·3	36·6	36·3	36·0	37·2	38·4	37·5	35·6	35·7	35·5	35·9	36·1	33·3	33·9	35·1	34·6	34·8	34·7
6	34·6	35·9	35·1	32·4	32·6	33·6	34·8	35·1	35·9	36·8	37·6	38·5	39·7	37·6	36·8	36·3	35·8	35·9	35·7	35·5	35·1	34·5	32·8	32·1	35·5
7	34·4	34·3	34·4	35·6	35·7	35·1	35·3	35·4	35·4	35·6	36·2	36·2	36·7	36·3	35·5	35·4	35·6	36·2	36·1	36·0	35·5	27·7	27·9	32·1	34·8
8	33·3	35·3	35·4	34·6	35·3	35·2	35·1	34·4	34·7	35·3	36·8	38·5	38·5	38·0	36·9	36·6	37·5	38·3	38·0	36·0	35·0	35·1	35·4	35·2	*36·0*
9	34·7	34·1	33·7	33·8	34·1	34·4	34·4	35·1	35·3	36·8	38·4	38·3	38·5	37·5	37·6	39·9	39·2	37·2	36·4	35·8	35·8	34·4	14·1	18·1	34·5
10 d	24·9	27·2	25·3	28·1	34·3	35·9	45·3	48·3	39·4	37·2	35·3	38·9	38·7	35·8	36·6	35·2	32·5	31·7	25·5	31·7	33·7	34·2	34·4	34·6	34·4
11 q	35·1	35·6	34·4	34·1	34·3	34·1	34·0	33·9	33·8	33·9	34·5	35·5	36·7	36·4	35·3	35·2	35·5	35·2	34·4	33·2	33·1	33·6	33·9	33·6	34·5
12	34·3	35·2	34·9	34·8	34·8	34·6	34·8	34·6	34·3	34·6	35·1	35·9	36·6	36·6	36·5	37·5	38·4	36·2	35·9	33·3	25·0	29·6	32·7	32·3	34·5
13	35·3	29·3	32·3	36·9	39·2	35·2	37·3	37·1	35·9	35·4	36·4	36·2	36·4	36·2	35·7	35·5	35·6	35·8	35·3	35·2	34·7	34·8	34·6	34·6	35·5
14	34·9	35·0	35·2	35·2	35·2	34·9	34·5	33·9	33·3	33·4	34·4	35·3	36·4	36·9	36·2	35·5	35·9	35·9	35·8	35·4	35·0	34·9	34·5	34·6	35·1
15 d	34·4	34·4	34·9	32·5	31·7	35·0	32·1	36·3	36·5	41·2	41·0	39·8	41·7	40·3	41·6	41·5	33·3	16·4	34·1	29·1	32·0	24·5	30·5	30·4	34·4
16	31·9	41·1	33·9	30·6	32·7	34·4	35·2	35·3	35·1	35·0	34·6	35·2	37·3	36·9	36·5	35·5	35·9	36·1	35·9	35·3	32·6	24·1	30·1	23·4	33·9
17 d	24·6	30·7	29·3	31·2	31·2	33·6	33·6	34·1	35·0	35·1	34·8	36·6	38·1	38·6	36·9	38·6	39·1	34·9	38·1	26·5	31·9	33·5	33·5	33·8	33·9
18	34·4	35·2	33·8	34·1	33·8	34·4	34·4	34·2	34·3	34·6	35·5	37·2	38·3	38·0	38·3	39·4	39·5	41·0	41·2	39·5	35·8	34·2	26·1	27·5	35·6
19	30·0	33·0	31·0	32·4	32·3	32·6	35·0	34·4	34·2	34·5	35·3	37·1	36·6	37·6	37·9	38·2	37·0	38·9	39·4	29·5	33·3	32·6	33·3	33·5	34·6
20	34·4	32·3	32·4	32·3	33·1	33·5	40·5	39·6	38·4	37·8	36·4	36·2	37·3	36·5	36·9	36·0	34·5	35·2	35·5	35·0	33·1	32·1	31·5	32·5	35·1
21	34·1	34·3	33·7	33·4	33·5	33·2	32·6	32·9	33·4	34·2	35·0	36·7	39·1	38·1	37·9	37·6	37·6	36·6	36·7	37·1	35·9	35·3	32·8	33·6	35·2
22	33·8	32·5	32·3	32·4	32·6	33·9	34·6	34·2	34·5	35·4	36·9	37·2	37·6	37·1	36·3	36·1	35·9	36·5	35·5	35·6	35·1	32·5	31·6	33·1	34·7
23 q	33·1	33·1	33·4	33·3	34·4	32·4	33·2	33·5	34·0	34·5	36·4	37·8	37·7	37·4	36·3	36·2	36·0	36·0	35·4	35·0	34·0	33·5	33·9	34·1	34·8
24 q	34·5	34·0	34·0	33·5	34·1	34·1	34·1	34·0	33·9	34·5	35·2	35·8	36·5	37·1	36·1	35·5	35·4	35·5	35·5	34·9	34·6	34·5	34·5	34·4	34·8
25 q	34·0	33·5	33·1	33·4	33·7	33·7	33·6	33·7	34·0	35·1	36·2	37·1	38·4	37·5	36·2	35·6	35·3	36·0	36·1	34·9	34·4	34·8	34·6	35·2	35·0
26	34·6	34·4	34·3	35·0	35·0	34·2	34·3	34·0	33·8	34·9	36·0	38·1	41·0	39·6	39·0	37·8	36·4	37·3	36·4	32·6	28·6	31·4	32·4	35·7	35·3
27	34·9	35·1	38·7	34·1	34·2	35·2	34·5	34·1	34·4	35·1	36·4	38·4	38·9	38·8	37·1	36·9	36·0	36·0	36·1	35·8	35·0	34·6	34·4	34·9	35·8
28 d	34·9	34·3	34·2	35·0	34·8	34·8	34·7	34·5	34·5	35·2	36·0	36·9	37·9	37·5	37·2	36·7	37·1	35·1	38·8	39·1	31·7	26·6	33·7	27·0	34·9
29 d	0·3	6·5	3·2	12·3	1·8	25·4	28·7	34·5	38·7	39·8	38·6	38·2	38·0	39·6	40·0	35·5	38·6	26·2	34·2	18·7	20·3	22·5	28·5	28·5	*26·6*
30	30·1	34·2	34·6	34·2	40·7	37·6	34·8	40·1	38·5	37·8	35·8	37·0	38·4	38·1	39·0	37·5	35·2	33·3	34·8	33·3	32·4	31·4	31·3	32·0	35·5
31 q	33·5	33·8	34·5	35·4	33·5	33·3	33·3	33·4	33·7	34·3	35·5	36·4	37·5	37·9	36·9	35·4	35·1	35·3	35·2	34·8	34·4	30·5	29·2	33·4	34·4
Mean	32·3	32·9	32·4	32·7	33·1	34·1	34·8	35·5	35·3	35·8	36·3	37·2	*38·0*	37·6	37·1	36·5	36·1	35·1	35·6	33·5	32·6	*31·7*	31·8	32·2	34·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

6 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	947	954	955	954	958	963	963	960	959	961	963	063	962	968	975	982	978	979	993	992	947	942	946	935	962
2	902	903	931	944	947	951	958	961	962	962	962	962	964	969	977	985	994	984	979	981	982	976	969	968	961
3	962	963	963	957	958	960	961	962	961	961	966	963	964	964	967	973	974	974	978	975	970	967	965	963	965
4	962	962	961	962	962	962	962	962	962	958	958	957	956	959	960	963	967	984	1006	1039	1001	947	946	962	967
5	953	961	967	968	965	964	966	966	965	967	967	968	968	968	969	970	971	971	970	972	971	968	968	967	967
6	965	965	950	955	956	956	957	957	960	961	965	967	963	964	967	967	967	967	965	966	965	968	967	952	962
7	947	953	956	954	958	962	962	960	961	962	962	963	961	960	960	961	951	961	963	963	967	972	958	952	960
8	957	958	958	958	957	956	956	960	963	963	963	963	963	963	967	967	968	968	972	973	972	971	971	968	964
9	967	964	962	960	958	958	957	958	961	959	957	958	958	960	962	964	962	962	961	962	962	963	931	878	956
10 d	836	843	843	902	920	936	946	936	956	970	982	984	996	997	992	989	987	984	980	974	970	965	965	967	*951*
11 q	966	964	963	963	963	962	962	962	964	964	965	965	963	964	965	967	966	964	965	964	963	964	961	957	964
12	961	962	963	962	961	960	959	958	960	962	962	961	962	963	970	970	972	972	969	969	973	967	961	950	964
13	937	919	942	934	929	934	941	947	951	955	960	959	961	964	965	965	963	962	960	958	958	957	958	959	952
14	961	962	952	962	961	961	960	958	959	959	957	961	961	959	962	962	962	962	961	960	959	958	957	958	960
15 d	959	961	961	961	958	942	933	946	956	949	954	968	979	982	996	1065	1144	1108	1124	1081	1005	962	956	958	*992*
16	948	900	925	937	946	952	948	944	954	961	965	965	967	965	969	972	973	972	971	969	973	969	899	898	952
17 d	879	894	900	893	931	953	959	963	961	960	966	970	964	964	975	973	975	978	979	995	983	975	969	965	955
18	965	965	968	968	967	966	965	964	962	959	959	959	959	962	964	965	968	971	979	995	996	978	972	976	969
19	973	965	957	941	935	955	962	965	963	959	957	957	958	960	963	973	980	984	986	1004	996	987	984	978	968
20	968	960	963	962	958	947	941	945	948	954	964	966	969	972	970	970	973	971	971	970	969	968	964	964	963
21	956	949	952	957	958	950	956	961	960	962	963	963	961	962	964	968	968	970	971	978	985	989	975	972	965
22	968	957	958	958	958	958	958	958	961	963	962	963	964	964	963	961	961	963	967	964	966	965	964	962	962
23 q	963	964	963	958	956	954	956	957	959	959	958	959	961	963	963	962	961	961	962	964	969	973	968	967	962
24 q	965	964	963	962	961	959	959	959	959	962	962	963	963	963	963	961	959	959	959	959	959	961	962	963	961
25 q	962	963	962	961	959	958	958	959	959	961	963	964	965	965	965	963	963	962	959	958	958	958	959	959	961
26	964	963	961	959	957	957	956	956	954	953	954	952	952	954	959	961	962	969	991	1029	1025	986	968	963	967
27	959	963	954	947	951	955	956	958	956	959	962	959	958	963	968	968	965	963	962	963	963	959	959	958	959
28 d	958	956	953	951	954	954	954	954	954	956	956	955	956	959	962	961	962	972	963	968	1004	999	965	877	958
29 d	804	797	825	763	721	879	940	929	929	944	965	968	965	970	990	993	1019	*-	-	-	-	-	-	-	
30	-	-	-	-	-	-	-	-	-	-*	959	964	973	983	980	980	997	997	978	972	969	967	961	959	
31 q	959	962	964	963	963	963	964	964	962	963	963	965	967	968	968	967	967	968	968	967	965	969	973	962	965
Mean	951	*949*	951	952	954	955	956	957	959	960	962	963	964	965	968	972	975	975	977	*980*	975	968	961	954	963

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −7γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

7 LERWICK — JANUARY 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +	Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	20 13	432	338	24 0	94	14 7	38·4	11·6	20 9	26·8	18 50	1000	929	24 0	71	2,1,1,2,2,1,4,3	16	1	75·0
2	6 7	390	330	0 12	60	0 11	40·7	23·4	2 5	17·3	16 11	1000	890	0 37	110	3,2,2,1,1,2,2,2	15	0	76·0
3	19 11	397	356	19 40	41	11 35	40·7	10·7	19 5	30·0	18 48	984	956	3 40	28	1,0,1,2,1,2,4,0	11	1	76·3
4	12 53	390	322	21 0	68	18 55	41·5	12·9	21 35	28·6	19 31	1053	928	21 50	125	0,0,0,1,2,2,4,4	13	1	76·0
5	7 35	381	358	0 0	23	12 53	38·(	29·7	4 47	8·9	19 48	975	946	0 48	29	2,1,1,1,2,0,2,0	9	0	75·2
6	7 13	391	362	1 50	29	2 0	44·0	31·3	23 4	12·7	22 21	974	941	2 22	33	3,1,1,1,2,0,0,2	10	0	75·0
7	23 0	392	367	2 55	25	12 29	38·9	23·8	22 21	15·1	21 26	978	946	23 6	32	0,1,0,1,2,1,2,2	9	0	74·8
8	6 30	387	365	0 8	22	17 56	39·2	32·1	0 7	7·1	19 3	976	955	0 0	21	2,0,0,0,2,1,1,0	6	0	74·5
9	22 48	416	228	24 0	188	15 51	42·4	-4·5	22 36	46·9	22 14	994	861	23 9	133	0,0·0,1,1,2,1,5	10	1	74·5
10 d	2 3	384	92	0 25	292	6 56	54·9	19·6	1 46	35·3	12 43	1004	749	0 34	255	6,3,3,2,3,2,3,0	22	1	74·2
11 q	23 27	381	366	11 26	15	12 50	37·1	30·1	18 59	7·0	19 7	968	951	23 37	17	1,0,0,0,0,0,2,1	4	0	74·2
12	6 6	384	361	21 36	23	16 34	39·9	21·7	20 5	18·2	20 13	980	942	24 0	38	0,0,0,0,2,1,3,2	8	0	74·2
13	5 59	394	353	3 55	41	0 43	42·3	27·1	1 30	15·2	15 9	965	903	1 15	62	3,3,1,1,0,0,0,0	8	1	74·2
14	13 43	391	370	11 43	21	13 6	37·5	33·0	9 42	4·5	15 23	963	955	22 10	*8*	0,0,0,0,1,0,0,0	1	0	74·1
15 d	16 43	*990*	328	11 28	*662*	16 47	*70·8*	8·7	16 59	62·1	16 42	*1226*	920	5 50	306	1,3,3,2,3,6,7,3	28	2	75·0
16	21 7	383	291	22 40	92	1 7	46·6	17·5	23 15	29·1	20 58	975	851	22 40	124	3,2,2,1,1,1,3,4	17	1	74·3
17 d	16 1	389	313	2 55	76	16 12	41·3	10·4	19 48	30·9	19 39	1005	877	0 8	128	3,3,1,2,1,2,4,2	18	1	75·1
18	21 15	413	355	21 49	58	21 42	44·2	24·7	22 37	19·5	19 56	1002	958	11 51	44	1,0,0,0,0,1,3,3	8	0	74·1
19	4 18	393	354	19 31	39	20 47	40·5	18·3	19 37	22·2	19 33	1017	929	4 19	88	2,2,1,1,1,2,4,2	15	1	72·9
20	5 30	398	356	11 41	42	6 39	42·5	30·4	22 33	12·1	16 53	976	936	6 45	40	2,2,1,2,2,2,1,1	13	1	72·5
21	22 30	419	366	4 56	53	12 33	40·0	27·4	22 21	12·6	22 17	991	945	1 44	46	1,1,1,0,1,0,1,3	8	0	72·1
22	21 39	391	368	22 28	23	12 39	38·3	30·3	1 51	8·0	0 0	971	952	1 41	19	2,1,1,0,0,1,0,2	7	0	72·5
23 q	17 55	385	366	21 6	19	11 18	38·2	31·3	20 28	6·9	21 2	976	951	5 18	25	1,1,0,1,1,0,1,1	6	0	72·7
24 q	17 5	387	375	2 20	*12*	13 30	37·3	33·4	3 10	*3·9*	0 0	966	958	6 25	*8*	0,0,0·0,0,0,0,0	0	0	72·9
25 q	14 31	387	369	11 0	18	12 22	39·1	32·9	2 8	6·2	12 0	965	957	18 12	*8*	0,0,0,0,1,1,0,0	2	0	73·0
26	16 43	404	364	21 19	40	12 33	42·0	26·0	20 55	16·0	20 5	1055	951	12 43	104	0,0,0,2,1,2,3,2	10	1	73·0
27	18 49	394	362	2 10	32	2 19	41·4	32·9	7 22	8·5	14 6	969	944	3 4	25	2,0,0,0,1,0,0,0	3	0	73·0
28 d	20 30	411	131	23 53	280	19 45	41·9	11·5	24 0	30·4	21 0	1035	796	23 49	239	2,1,0,1,1,2,4,6	17	1	73·0
29 d	5 38	422	*-33*	4 20	455	5 55	48·9	*-22·2*	4 24	*71·1*	17 16	1065*	*651**	4 24	*414**	5,7,4,3,3 (4)(5)(4)	35	2	73·0
30	6 56	385	292	0 5	93	4 40	48·7	29·1	16 50	19·6	16 50	1009	855	23 17	154	(4)(3)(2) 2,1,2,1.1	16	1	73·0
31 q	16 49	381	359	22 16	22	13 17	38·2	25·6	21 38	12·6	22 2	977	949	24 0	28	1,1,0,0,0,0,0,3	5	0	73·1
Mean	- -	414	319	- -	95	- -	42·5	21·6	- -	20·8	- -	1000	911	- -	89	-	11·3	0·55	74·0

* Highest and lowest values recorded. V trace lost 29d.17h.16m. to 30d.9h.34m.

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

8 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	379	372	372	368	371	377	382	381	378	374	372	372	373	376	382	384	381	382	380	381	381	381	380	380	377
2	381	377	379	380	383	384	383	389	383	377	373	365	365	359	376	364	369	373	369	366	372	372	372	379	375
3	378	365	372	363	372	382	384	381	376	376	370	373	372	372	370	369	373	380	379	381	382	381	377	381	375
4	378	377	377	378	376	376	386	383	381	374	371	372	377	383	387	386	387	387	381	379	377	375	378	381	379
5 d	384	382	379	382	382	390	393	369	375	356	359	363	363	364	363	368	371	377	381	369	364	375	381	373	373
6	355	373	366	369	377	386	391	385	378	351	342	355	377	383	381	379	381	381	372	379	376	375	378	381	374
7	378	378	377	381	381	383	383	380	378	364	359	366	369	371	377	380	380	378	374	376	382	382	381	383	377
8	380	380	377	370	380	385	388	387	369	356	356	357	355	357	363	376	378	382	382	386	385	378	368	372	374
9	356	372	375	378	382	382	373	381	380	360	359	362	357	366	370	378	377	379	378	383	378	378	375	393	374
10	379	379	378	378	383	386	386	385	376	349	379	371	374	375	376	382	382	384	381	378	378	382	380	384	379
11	395	378	378	385	377	386	384	395	387	375	373	371	372	375	378	381	364	378	383	384	386	386	384	383	381
12	382	380	380	379	379	384	378	390	383	368	360	357	361	363	372	378	382	376	384	383	382	382	391	382	377
13 q	383	382	381	384	386	387	388	387	384	374	365	368	371	370	372	378	384	386	387	388	386	384	384	386	381
14	387	386	386	387	389	391	395	394	388	375	373	374	372	377	386	390	394	395	391	391	388	406	373	381	386
15 d	378	334	352	367	374	386	399	394	384	348	353	361	356	389	393	378	376	382	391	412	398	381	366	352	375
16 d	316	347	363	374	375	378	375	370	378	370	356	361	369	378	359	378	378	383	391	361	376	378	381	395	*370*
17	378	374	374	375	378	386	383	380	377	375	369	361	367	366	378	395	374	386	382	381	382	372	374	356	376
18	378	370	377	378	378	378	379	388	386	379	372	369	372	373	378	380	384	385	385	386	383	380	388	387	380
19 q	374	383	380	381	382	379	383	390	386	382	375	375	381	382	382	382	387	388	388	390	388	389	392	387	384
20 q	384	381	382	386	388	391	392	394	393	383	376	371	370	378	381	388	378	382	388	389	387	383	383	383	384
21 q	383	383	385	385	387	388	391	391	389	383	379	374	372	375	381	383	384	385	386	387	382	377	379	381	383
22	384	386	388	387	388	392	396	393	388	381	384	384	378	375	386	383	385	387	387	385	389	392	395	394	387
23	383	385	384	386	389	391	391	391	389	385	382	386	381	395	391	380	378	387	393	391	391	391	388	387	*387*
24	384	387	387	390	394	391	395	396	395	384	377	374	377	378	383	384	384	392	387	387	378	385	389	383	386
25	386	396	375	382	378	391	396	391	389	378	373	371	368	369	375	377	379	384	387	391	380	380	383	387	382
26 d	383	383	387	382	374	386	392	388	385	380	378	378	378	378	388	390	389	374	373	361	378	356	358	377	379
27 d	382	379	375	373	375	376	378	382	365	364	369	373	381	374	378	390	384	379	377	381	362	372	377	381	376
28	373	374	369	373	373	370	379	378	371	366	366	369	372	375	383	378	367	375	389	377	380	383	384	382	375
Mean	377	377	377	379	380	384	*387*	386	382	371	*369*	369	371	374	378	381	380	382	383	382	381	381	380	381	379

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −7γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

9 LERWICK (D) — 11° + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	35·2	34·3	35·1	35·9	35·2	34·0	33·3	33·9	33·8	33·9	34·6	36·2	37·0	36·9	35·8	34·8	34·6	34·9	34·7	34·3	34·3	33·4	33·4	33·6	34·7
2	34·2	33·9	34·4	34·4	34·3	34·5	35·2	35·5	34·9	36·9	37·2	38·9	39·4	41·9	43·2	38·3	40·4	37·2	35·2	28·1	29·7	32·4	29·4	31·1	*35·4*
3	30·1	30·0	34·0	34·4	35·6	33·3	34·3	34·4	34·5	35·2	35·9	37·4	37·6	38·5	38·1	38·2	36·0	35·7	35·5	35·0	34·4	34·0	33·4	32·4	34·9
4	33·0	33·6	33·4	32·8	32·4	34·1	33·0	33·0	33·4	34·5	35·5	36·7	38·2	38·4	37·0	35·9	35·3	35·7	36·1	36·1	35·5	34·0	33·0	32·6	34·7
5 d	33·7	31·4	33·2	32·9	34·7	47·8	41·1	30·4	33·6	32·2	35·4	37·0	37·8	39·4	38·8	36·1	35·2	35·4	35·3	34·4	31·2	32·8	32·1	31·5	35·1
6	34·1	28·5	33·4	34·8	35·3	34·0	35·4	39·7	38·4	36·2	39·4	40·0	38·2	38·5	37·0	34·8	34·1	34·3	33·4	34·0	30·4	32·8	32·2	32·0	35·0
7	31·8	33·5	33·9	34·1	34·4	34·3	34·5	34·0	33·1	34·4	34·2	35·1	37·0	37·5	37·6	37·0	36·2	35·2	30·4	32·0	34·8	33·8	33·2	33·3	34·4
8	32·8	35·2	36·2	33·5	32·9	34·2	33·4	33·5	35·6	34·3	35·3	40·1	41·0	42·4	40·3	37·2	35·1	28·2	35·2	34·5	34·2	30·7	27·2	32·1	34·8
9	24·6	28·4	31·0	33·3	32·9	32·0	33·5	36·8	35·4	34·3	34·8	37·3	38·2	36·3	37·3	32·5	35·4	35·6	33·6	26·4	31·0	29·9	29·5	29·0	32·9
10	31·2	32·8	34·2	37·3	33·3	32·5	32·4	34·2	33·7	33·8	35·0	34·9	35·8	36·3	35·8	34·9	34·3	33·0	33·5	30·8	32·5	32·4	31·3	32·9	33·7
11	32·2	31·2	31·9	31·2	34·6	33·5	36·9	34·9	34·3	32·3	32·1	34·3	35·8	36·2	36·8	35·8	32·2	34·8	33·5	32·3	31·0	32·4	32·7	32·6	33·6
12	32·9	33·3	34·5	34·6	33·9	33·2	35·2	31·9	30·4	30·2	31·9	34·3	36·1	37·4	36·8	35·3	33·8	31·9	33·6	32·9	32·4	32·0	30·4	32·3	33·4
13 q	32·5	34·0	34·2	34·5	33·9	32·9	32·0	31·5	31·2	31·4	32·9	35·3	37·2	37·4	38·0	36·0	34·2	33·9	33·3	33·0	33·1	31·5	32·7	33·3	33·7
14	33·6	33·6	33·7	33·7	33·7	33·7	33·4	32·7	32·9	32·2	33·1	36·0	37·2	39·2	38·2	37·9	37·4	36·8	36·3	37·4	36·2	31·3	28·6	30·9	34·6
15 d	35·3	40·4	23·8	23·1	25·3	29·3	29·1	31·2	31·5	33·7	38·9	40·6	39·6	39·0	41·9	41·5	41·4	42·6	38·7	34·0	29·9	19·3	19·2	23·0	33·0
16 d	32·4	36·6	26·4	27·7	28·3	29·6	30·6	32·6	32·3	35·1	35·5	35·4	37·0	41·2	42·0	40·1	39·3	40·4	20·8	32·7	33·4	28·5	29·3	27·0	33·1
17	30·0	31·1	30·7	32·7	33·7	32·8	32·1	32·3	32·3	33·1	34·7	34·9	37·4	38·0	37·4	38·9	34·3	35·2	35·1	30·1	22·0	30·1	29·1	30·4	32·9
18	28·9	28·3	32·3	32·0	31·7	32·0	33·1	31·7	31·6	32·8	32·5	34·5	36·4	38·2	40·2	39·1	37·1	35·5	35·0	34·0	33·2	33·0	32·5	26·7	33·4
19 q	25·4	28·9	28·6	29·2	29·8	31·0	33·1	31·4	31·5	31·7	33·9	35·2	37·3	39·3	39·0	38·2	36·2	35·3	34·4	34·2	33·5	32·0	30·3	30·3	32·9
20 q	31·2	31·2	33·2	33·0	33·3	33·0	32·7	32·6	32·4	31·4	32·3	34·2	35·2	37·9	38·9	39·0	36·5	34·0	33·7	33·3	32·3	31·3	28·1	28·4	33·3
21 q	29·3	30·9	31·1	30·6	30·5	31·2	30·4	30·2	29·9	29·6	31·0	32·8	33·7	34·9	34·9	32·9	31·8	31·3	31·4	31·5	30·8	28·1	29·1	29·5	31·1
22	30·4	30·8	30·4	29·6	29·8	29·6	29·5	29·4	29·5	30·3	31·8	35·4	35·6	36·7	37·1	35·0	34·6	34·0	32·7	30·2	30·6	27·2	21·2	23·8	31·1
23	26·2	28·2	29·4	29·8	30·2	30·0	29·5	29·8	30·2	30·5	31·7	35·2	35·0	39·0	38·7	36·8	33·3	33·1	33·3	32·5	31·7	31·4	31·0	28·9	31·9
24	27·4	30·6	30·5	31·0	30·8	30·4	31·4	32·1	31·5	31·3	32·2	33·3	35·3	36·4	36·1	33·8	32·4	32·7	34·1	34·2	27·3	29·7	30·5	30·7	31·9
25	21·4	14·5	27·0	27·4	30·5	31·0	32·1	32·8	33·3	33·6	34·0	33·1	34·9	36·2	36·2	34·9	33·2	33·2	33·1	32·6	15·2	27·7	30·3	29·6	30·3
26 d	30·3	31·4	30·4	31·0	31·2	31·8	31·2	31·3	31·8	33·5	33·9	35·8	37·6	38·1	38·0	32·0	33·1	27·1	7·8	25·3	13·6	21·2	28·2	33·5	*30·0*
27 d	34·1	31·8	29·9	29·1	30·2	31·1	31·3	32·0	33·0	30·8	31·3	33·6	37·1	37·6	39·1	34·0	33·2	32·6	29·5	24·9	14·8	23·3	30·1	31·8	31·1
28	30·9	31·3	31·4	31·5	31·1	31·0	31·0	30·8	31·5	32·8	34·1	35·8	36·7	36·8	37·0	35·0	31·2	31·8	23·1	32·0	31·9	30·7	30·2	31·9	32·1
Mean	30·9	31·4	31·7	32·0	32·3	32·8	32·9	32·7	32·8	32·9	34·1	35·8	37·0	38·1	*38·1*	36·3	35·1	34·3	32·2	32·2	30·0	30·3	*29·9*	30·5	33·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

10 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	949	957	957	958	958	957	962	963	963	965	964	963	961	958	959	962	964	967	971	969	967	964	963	961	962
2	956	959	960	961	962	963	961	957	959	959	960	964	965	976	990	1022	1001	987	995	1004	985	975	969	945	*972*
3	919	928	942	952	952	956	959	963	964	960	964	964	966	968	970	972	973	970	971	971	969	969	969	963	961
4	959	958	961	959	959	958	958	961	961	962	962	961	958	957	957	958	958	963	965	968	969	970	964	951	961
5 d	942	942	953	958	951	898	879	926	943	963	967	966	966	969	975	976	972	969	969	981	993	976	966	963	957
6	900	899	933	945	942	944	947	947	952	963	971	971	964	960	962	967	966	965	974	971	975	972	965	958	955
7	957	959	962	962	961	960	959	961	964	968	966	965	965	964	965	966	966	972	978	975	968	969	968	964	965
8	963	950	922	909	932	948	953	955	963	968	971	971	972	977	986	980	980	981	969	965	965	971	972	908	960
9	873	895	932	948	954	951	959	953	955	960	965	965	973	975	977	982	980	971	974	974	969	965	956	938	956
10	937	949	954	950	948	952	953	954	957	962	963	955	956	956	962	965	963	960	963	964	965	962	964	955	957
11	934	939	952	954	952	941	943	939	946	954	956	958	960	963	966	973	992	975	966	964	962	959	959	959	957
12	959	961	961	955	958	954	951	945	955	961	963	963	962	964	966	967	970	973	966	964	962	961	953	954	960
13 q	956	959	961	964	963	961	960	960	960	959	960	959	960	964	965	966	967	967	964	961	960	959	960	959	961
14	960	961	963	963	963	960	959	958	958	959	956	954	955	953	956	959	963	966	972	979	994	1019	1005	973	967
15 d	959	862	865	901	963	947	950	951	953	961	952	953	959	959	970	985	992	1003	1019	1056	1018	961	934	927	957
16 d	897	971	905	932	934	956	958	961	960	961	961	961	961	968	986	1005	1007	1014	1028	1032	1009	996	980	944	967
17	949	958	959	954	951	950	956	959	961	960	960	963	961	961	961	967	989	986	987	993	974	963	960	944	964
18	924	940	945	954	959	960	957	957	958	960	960	960	959	959	965	977	975	971	970	969	967	971	963	937	959
19 q	933	937	939	945	950	955	955	955	959	960	959	956	954	954	959	961	964	965	965	965	965	965	956	949	955
20 q	956	959	960	960	958	958	958	958	957	959	958	955	955	953	955	960	972	972	966	965	966	971	972	967	961
21 q	962	961	960	958	957	955	955	955	955	958	958	957	955	955	954	957	959	961	961	961	965	971	966	961	959
22	959	958	955	957	957	956	954	955	959	957	955	955	957	955	958	962	964	964	966	969	966	966	950	941	958
23	942	947	954	955	954	953	953	952	952	953	951	946	946	945	955	960	965	957	955	955	957	957	960	955	953
24	956	950	953	954	953	953	948	947	950	959	959	960	957	959	959	962	961	961	962	968	980	971	962	959	958
25	907	866	923	934	937	936	938	944	948	956	957	955	956	958	962	967	966	962	959	957	973	991	951	946	*946*
26 d	952	957	956	958	950	944	945	949	951	954	955	955	959	960	961	1006	1055	1042	933	983	948	918	921	916	964
27 d	886	912	940	955	959	959	956	957	961	960	959	959	961	967	977	995	993	993	993	920	946	969	962	959	958
28	953	943	949	955	961	966	963	964	965	964	965	963	963	965	968	979	990	981	977	969	965	961	957	958	964
Mean	*939*	941	946	950	953	952	952	954	957	960	961	960	960	961	966	973	*977*	976	973	974	971	967	962	951	960

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −7γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

11 LERWICK — FEBRUARY 1945

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force									
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 q	14 55	386	363	4 2	*23*	6 28	38·2	32·4	21 21	*5·8*	18 23	971	946	0 42	25	2,2,0,0,0,0,0,0	4	0	73·2
2	24 0	400	354	15 14	46	14 56	47·8	25·3	23 58	22·5	15 18	1033	921	24 0	112	0,0,1,1,3.3.3,3	14	1	73·7
3	0 0	402	358	3 40	44	13 0	39·1	25·5	0 0	13·6	16 14	975	916	0 40	59	2,2,0,1,1,1,0,1	8	0	73·9
4	16 47	394	367	5 0	27	12 33	38·7	31·2	0 0	7·5	22 0	971	946	24 0	25	1,2,1,0,1,1,0,2	8	0	73·6
5 d	5 34	406	351	9 44	55	6 2	51·7	28·9	7 12	22·8	20 5	1000	867	6 17	133	2,4,4,2,2,1,2,2	19	1	74·2
6	13 38	389	325	0 35	64	11 20	42·3	24·6	20 44	17·7	20 42	986	862	0 44	124	4,2,2,2,1,1,2,2	16	1	75·0
7	23 15	389	347	10 3	42	13 18	38·3	24·5	18 42	13·8	18 51	985	951	0 0	34	2,1,1,2,0,1,3,0	10	1	75·5
8	7 24	393	344	10 7	49	14 0	44·9	20·1	17 18	24·8	14 17	987	884	24 0	103	3,3,2,2,2,3,1,4	20	1	76·2
9	23 33	413	331	0 27	82	12 6	40·3	18·5	19 48	21·8	15 10	987	862	0 47	125	3,1,2,1,2,2,3,3	17	1	76·7
10	24 0	395	342	9 45	53	3 18	39·5	29·5	19 51	10·0	20 14	970	927	0 0	43	2,2,1,2,0,0,1,2	10	1	77·1
11	0 16	405	352	16 32	53	6 39	41·8	29·2	1 10	12·6	16 33	1000	929	1 0	71	2,2,2,2,1,3,1,1	14	1	76·6
12	22 11	412	356	11 50	56	2 55	38·6	27·3	22 10	11·3	17 32	975	940	6 51	35	2,2,2,1,0,2,0,2	11	0	76·1
13 q	6 34	391	360	10 48	31	14 19	39·0	29·5	21 38	9·5	17 7	969	955	0 15	*14*	0,0,0,1,1,0,0,1	3	0	76·0
14	21 52	421	360	22 37	61	13 19	40·2	26·0	22 52	14·2	21 37	1037	951	11 37	86	0,0,0,1,1,0,2,3	7	1	76·0
15 d	19 45	451	310	1 56	141	1 2	47·1	11·4	21 29	35·7	19 51	*1110*	*837*	1 55	*273*	4,3,2,2,3,2,5,4	25	1	76·2
16 d	18 28	424	*272*	0 24	*152*	14 28	44·3	−1·5	18 19	45·8	18 11	1077	851	1 20	226	4,3,2,2,3,3,5,3	25	1	76·4
17	20 11	411	330	23 35	81	16 9	40·2	7·7	20 6	32·5	19 51	1014	917	24 0	97	2,1,1,1,1,3,4,3	16	1	76·9
18	22 47	420	364	1 6	56	14 55	41·9	24·6	23 14	17·3	15 30	979	917	0 0	62	2,1,2,1,2,2,0,3	13	0	77·5
19 q	22 15	398	370	0 40	28	13 12	40·2	24·1	0 29	16·1	21 3	967	926	0 0	41	2,1,1,1,2,1,0,2	10	0	78·0
20 q	7 50	397	366	12 12	31	16 11	39·7	27·4	22 31	12·3	16 55	978	953	13 31	25	1,0,0,0,2,2,0,2	7	0	78·3
21 q	6 20	394	370	12 20	24	14 2	35·4	26·2	21 57	9·2	21 26	972	952	7 10	20	0,0,0,0,0,0,1,1	2	0	78·9
22	21 59	433	367	13 24	66	14 28	39·9	18·1	22 21	21·8	21 36	972	934	23 32	38	1,0,0,1,2,1,1,3	9	1	79·0
23	13 34	403	366	10 47	37	14 20	41·0	23·4	0 0	17·6	16 16	970	939	0 37	31	2,0,0,2,2,2,1,2	11	1	78·8
24	17 34	403	366	10 55	37	12 31	37·1	23·3	0 9	13·8	20 45	985	947	1 12	38	2,1,0,1,1,1,2,2	10	1	78·2
25	1 15	428	356	0 35	72	14 32	37·2	*−3·1*	20 37	40·3	20 32	998	841	1 20	157	4,2,2,2,1,0,5,2	18	1	78·1
26 d	18 20	443	340	21 9	103	16 42	42·0	−1·7	18 21	43·7	18 30	1069	889	21 7	180	1,2,1,1,2,5,5,4	21	1	77·7
27 d	19 23	*456*	304	19 48	*152*	19 40	*58·4*	3·5	19 57	*54·9*	19 0	1006	843	19 38	163	3,2,2,2,2,2,5,3	21	1	77·2
28	18 39	415	357	16 25	55	12 24	38·1	13·6	18 32	24·5	16 30	993	939	1 55	54	2,1,1,1,1,2,4,1	13	1	77·8
Mean	− −	410	348	− −	61	− −	41·5	20·3	− −	21·2	− −	998	912	− −	86	−	16·9	0·68	76·5

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

12 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	383	381	378	378	383	384	384	382	378	367	357	352	365	369	374	378	378	382	384	383	386	385	386	387	378
2	386	386	386	386	386	387	387	389	385	375	365	362	362	367	369	384	375	385	390	394	392	393	392	392	382
3	394	400	383	376	377	379	382	390	381	362	361	364	359	362	374	384	374	379	377	378	378	381	384	382	378
4 q	382	382	381	381	382	383	383	386	385	374	368	365	369	369	375	382	384	386	390	389	384	385	385	394	381
5	386	385	379	383	386	384	390	391	386	374	368	364	364	367	388	408	425	484	480	360	345	342	357	371	*386*
6	373	378	374	375	378	381	375	370	372	363	351	340	344	351	375	386	377	375	376	378	358	375	382	377	370
7	382	378	377	375	372	375	381	376	369	353	361	358	364	369	382	387	384	373	387	387	389	388	387	387	377
8	386	388	387	347	355	388	395	387	363	365	374	357	360	370	383	379	378	372	382	387	387	385	384	386	377
9	386	384	383	382	381	382	382	382	380	374	369	365	366	375	380	381	387	381	370	369	366	369	371	372	377
10	375	374	378	379	382	384	387	382	378	369	364	365	369	375	381	387	387	390	391	392	392	394	394	385	381
11 d	355	253	312	265	362	387	384	373	360	343	336	354	363	361	425	413	388	484	398	370	368	364	366	374	365
12 d	378	365	365	357	368	356	359	359	349	339	336	356	369	410	434	481	494	525	454	407	300	251	272	302	374
13	365	366	365	364	368	369	369	365	356	353	355	349	357	363	379	373	369	365	369	375	378	375	374	375	367
14	374	373	371	372	373	370	369	371	366	355	349	343	350	361	368	377	368	377	379	382	384	382	361	343	367
15 d	264	158	-8	277	337	347	346	346	363	356	353	359	364	389	406	395	395	438	396	371	300	184	185	270	*316*
16	193	304	356	362	369	360	365	367	365	365	343	345	365	381	391	412	391	410	383	373	380	389	360	365	362
17	370	351	349	372	374	376	371	365	367	362	359	356	365	374	377	377	377	381	375	379	377	374	382	387	371
18	373	374	374	374	376	377	381	384	378	367	363	366	365	353	372	371	382	375	378	377	391	399	375	393	376
19	365	368	378	377	378	382	381	378	374	364	357	353	356	371	373	377	376	384	386	386	390	387	387	385	376
20	386	374	369	377	382	386	384	378	373	363	359	356	361	371	375	382	388	382	390	402	291	322	359	369	370
21	374	371	367	367	374	374	381	383	377	362	354	354	360	366	378	384	383	399	409	375	377	382	381	383	376
22 q	377	374	369	373	382	380	379	378	372	361	356	359	359	366	370	374	378	382	386	388	387	387	387	384	375
23 q	383	382	382	383	386	382	386	380	370	356	348	349	355	361	370	373	380	382	387	387	387	387	385	385	376
24	385	387	387	389	391	390	383	378	374	347	340	347	357	374	364	393	380	374	388	393	393	391	386	381	378
25	367	374	378	380	383	382	383	379	371	357	353	348	352	349	366	386	396	382	389	396	396	395	395	353	375
26 d	343	340	359	376	364	355	401	349	310	309	363	374	370	387	392	461	422	389	390	390	360	374	347	361	370
27	361	360	335	362	380	387	382	377	375	358	326	332	339	365	382	391	380	383	431	405	374	382	339	387	371
28 d	390	379	374	393	405	406	404	368	367	386	375	316	404	399	358	365	365	363	369	371	374	374	374	370	377
29	369	371	369	370	375	363	361	354	340	328	313	314	348	373	386	374	381	378	378	377	382	383	364	373	363
30 q	375	374	373	377	378	376	373	365	354	341	337	337	355	363	375	377	377	381	382	382	384	382	381	384	370
31 q	387	383	382	381	382	384	383	378	365	353	348	350	356	366	377	386	387	382	387	391	392	396	391	382	378
Mean	367	362	358	368	376	378	380	375	368	358	354	*352*	361	370	381	390	387	*394*	391	384	372	370	367	372	372

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}3'$; V, -6γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

13 LERWICK (D) — 11° + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	31·9	32·9	34·4	33·5	32·2	31·2	31·1	31·0	30·6	31·4	33·6	35·1	36·3	37·3	36·4	35·2	32·6	32·5	33·4	32·9	32·6	32·1	32·0	31·9	33·1
2	32·2	32·5	32·2	32·1	32·1	32·0	31·9	31·6	31·2	31·3	33·3	36·6	38·4	39·6	39·3	39·0	30·8	34·8	34·6	34·1	33·4	33·0	32·8	32·6	33·8
3	32·9	27·2	25·2	29·9	32·4	32·5	32·2	31·4	32·0	32·4	34·7	37·0	37·9	38·3	37·2	37·1	35·9	34·6	29·4	30·9	31·7	31·2	30·8	31·1	32·7
4 q	32·0	32·1	33·3	32·0	32·9	32·3	31·6	31·2	31·1	30·5	31·7	33·7	36·7	37·9	37·1	35·9	35·8	35·1	34·8	34·5	32·7	32·5	31·2	28·5	33·2
5	28·0	26·4	29·4	30·7	30·9	32·1	32·0	31·3	31·0	29·9	31·5	35·7	38·1	40·1	41·2	41·0	39·3	42·7	32·7	27·9	18·2	13·8	29·2	31·0	31·8
6	34·7	33·8	31·1	31·1	31·7	31·9	31·2	31·3	29·9	30·4	33·8	37·3	42·0	39·5	40·8	37·9	32·2	20·4	26·1	25·2	29·2	27·9	31·3	27·7	32·0
7	30·3	32·2	34·1	32·6	32·2	32·0	32·2	33·3	32·0	32·3	34·0	36·0	38·2	38·5	38·2	36·7	36·6	32·8	31·3	33·8	33·9	33·0	31·6	32·9	33·8
8	36·1	32·8	30·6	31·9	37·1	29·9	30·9	31·2	34·0	33·0	36·2	41·1	43·1	42·4	39·9	38·9	38·6	32·9	35·3	34·2	34·0	33·2	32·6	32·5	*35·1*
9	32·4	32·6	32·5	32·0	31·8	31·5	31·2	30·9	31·1	31·1	33·9	36·0	37·4	37·8	36·9	35·1	34·4	33·6	31·3	25·1	27·9	27·1	30·9	31·3	32·3
10	30·2	33·0	32·5	31·6	31·0	31·1	30·8	30·3	29·2	30·0	31·9	34·8	36·8	37·3	36·9	36·2	34·8	34·2	34·4	34·6	34·2	34·0	34·0	29·8	33·1
11 d	25·3	20·2	17·4	31·5	29·6	24·8	28·3	29·3	30·4	32·9	35·8	37·8	40·7	41·1	38·2	36·4	42·5	38·9	32·8	34·0	33·0	32·2	31·7	27·3	32·2
12 d	30·6	31·8	31·1	31·7	31·4	29·8	31·1	30·5	31·1	33·0	31·9	39·1	37·0	41·8	41·3	34·4	38·9	34·1	25·9	31·1	16·3	18·0	-0·9	16·8	29·9
13	26·1	33·9	33·9	33·2	32·8	34·4	34·9	35·2	36·6	36·2	36·1	36·9	38·3	37·9	35·0	35·8	34·3	33·4	32·0	31·9	32·1	32·8	32·9	32·9	34·1
14	33·0	32·7	32·0	32·2	31·6	29·9	29·6	28·9	29·0	30·2	33·3	37·6	37·3	37·0	37·0	36·0	33·0	33·8	33·9	33·1	25·2	20·5	16·9	22·3	31·1
15 d	22·8	9·6	3·9	20·1	13·9	28·7	34·8	40·0	34·0	32·3	33·2	36·9	36·9	39·1	41·1	45·0	39·0	37·3	18·5	23·6	21·7	30·9	40·2	14·4	*29·1*
16	30·5	27·6	23·3	28·8	25·2	26·3	28·2	27·9	27·3	30·4	33·3	37·2	39·9	41·6	37·8	39·2	39·0	23·3	29·6	32·5	29·2	24·0	33·3	35·1	31·3
17	30·0	32·6	36·0	31·4	30·8	31·1	31·0	31·9	31·5	32·1	33·9	36·0	38·5	39·9	39·4	37·0	35·1	32·5	31·6	29·4	29·4	31·4	28·9	31·9	33·1
18	30·9	27·7	28·0	26·1	28·8	29·8	30·6	29·9	30·5	31·1	33·0	37·4	41·9	41·1	39·2	36·9	35·8	27·8	30·6	34·1	32·4	29·5	26·9	31·2	32·1
19	27·9	33·8	32·8	31·0	32·1	30·8	31·3	30·2	29·6	30·8	32·3	35·8	39·0	39·8	39·1	36·7	34·4	33·7	33·6	33·1	30·9	31·8	33·2	33·3	33·2
20	35·1	27·1	28·8	31·8	31·5	30·3	30·0	29·8	29·9	31·8	35·6	38·1	39·7	39·8	39·0	37·1	36·8	35·7	35·7	33·6	19·7	9·8	24·4	27·0	31·6
21	31·8	32·1	30·8	28·2	30·9	31·3	31·2	29·9	29·5	31·8	34·5	36·5	39·3	39·5	39·0	38·1	35·4	34·8	21·8	23·7	33·9	33·3	31·6	31·4	32·5
22 q	32·1	32·9	33·1	33·3	31·8	32·0	30·8	30·2	30·2	31·3	35·1	37·7	38·5	38·1	38·0	35·2	33·5	33·1	33·4	33·6	33·4	33·2	33·3	33·4	33·6
23 q	33·1	33·0	33·8	32·6	31·1	31·8	30·9	30·4	30·8	32·1	34·0	36·4	39·1	39·1	38·4	36·6	35·0	33·9	33·9	33·6	31·9	32·1	33·4	33·8	33·8
24	33·5	32·7	32·2	32·1	31·9	31·0	31·1	30·0	29·4	30·4	36·1	37·2	39·9	42·9	41·1	44·1	43·7	38·9	36·1	35·6	34·5	35·6	30·7	31·7	*35·1*
25	32·7	32·3	31·2	31·3	31·7	32·0	31·6	30·1	29·7	31·0	33·6	37·1	40·2	41·8	39·8	37·8	37·9	32·7	33·4	34·7	34·0	30·9	32·6	41·1	34·2
26 d	31·2	11·9	19·5	26·1	29·9	39·4	33·9	38·4	33·1	40·1	36·8	37·9	39·8	41·4	38·3	43·1	40·2	36·2	21·4	9·5	28·9	29·1	34·6	36·8	32·4
27	35·0	30·5	36·9	32·7	31·2	29·9	28·7	28·3	29·3	31·6	36·9	41·8	42·1	39·0	39·8	34·1	34·3	29·9	17·4	13·6	24·7	26·3	36·8	32·6	31·8
28 d	32·4	33·0	33·2	32·1	31·9	30·2	31·4	32·3	33·2	31·7	34·5	37·0	41·2	42·2	37·3	36·9	35·9	34·5	34·5	34·3	33·3	33·6	32·9	32·6	34·3
29	32·2	33·0	33·0	32·0	33·0	35·4	34·8	34·2	30·3	34·3	35·6	41·3	40·3	39·2	38·2	33·0	32·6	32·8	32·4	32·4	27·3	24·9	26·8	33·1	33·4
30 q	33·2	32·5	32·2	32·0	31·3	30·6	29·1	27·9	28·3	31·5	34·9	37·7	39·2	38·8	37·7	35·2	33·1	32·7	32·5	32·1	32·0	32·3	32·3	33·0	33·0
31 q	32·9	32·8	32·1	31·8	31·4	30·7	29·6	28·5	28·4	33·8	34·0	37·0	39·2	39·2	38·0	35·9	33·5	31·8	32·9	33·3	33·2	32·2	27·6	23·8	32·7
Mean	31·4	30·0	30·0	30·9	30·9	31·2	31·2	31·2	30·8	32·0	34·2	37·2	39·1	*39·6*	38·6	37·3	36·0	33·4	30·9	30·5	29·8	*29·1*	30·2	30·5	32·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

14 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	958	961	957	956	960	962	962	962	961	960	962	962	958	962	965	970	969	968	964	963	962	962	961	959	962
2	958	960	962	962	963	962	961	960	961	959	958	956	954	956	960	968	993	976	967	962	961	958	957	956	962
3	946	916	915	922	922	935	945	947	947	953	951	951	957	954	956	967	978	980	989	984	975	968	962	961	953
4 q	958	957	957	957	960	962	960	962	962	961	957	953	951	956	957	962	965	964	964	967	972	968	966	941	960
5	924	928	944	951	956	957	957	958	960	961	957	955	957	957	958	977	1024	1119	1167	1076	1002	961	955	935	*979*
6	945	916	941	954	960	961	965	965	967	967	968	966	965	968	972	978	1003	1022	1003	999	955	963	953	936	966
7	910	930	952	959	963	958	956	961	969	978	979	973	964	962	963	969	982	989	981	974	971	969	965	964	964
8	949	944	952	954	890	917	938	952	959	958	956	962	971	978	983	995	1050	1023	983	974	968	968	967	966	965
9	965	965	964	964	964	963	963	963	962	961	961	964	963	962	964	968	971	982	996	1002	991	959	910	908	964
10	946	956	960	962	963	962	963	965	968	968	965	962	960	961	962	963	964	962	962	962	962	962	963	959	962
11 d	823	810	812	828	962	924	941	945	955	958	972	975	986	991	1044	1049	1041	1080	1104	927	993	980	973	966	960
12 d	951	957	957	958	958	943	933	944	958	968	984	976	969	966	1021	1095	1085	1130	1110	1030	835	813	812	775	964
13	894	950	966	970	970	968	965	968	970	975	983	995	995	985	991	988	986	985	978	972	967	965	966	967	972
14	969	971	972	971	971	969	966	963	964	965	965	965	964	964	973	981	997	985	979	975	976	968	937	927	968
15 d	775	651	700	785	836	885	888	916	920	937	947	958	964	963	985	1028	1015	1058	1074	1017	910	869	700	758	*897*
16	796	856	891	902	910	945	960	962	970	967	977	984	969	976	1004	1030	1024	1045	1018	994	987	974	942	888	957
17	933	949	931	951	967	970	968	965	962	963	962	959	959	962	970	975	981	986	988	986	974	954	934	904	961
18	930	939	943	952	959	960	964	964	964	964	959	958	966	967	969	977	983	997	993	983	973	946	940	914	961
19	930	937	948	957	963	964	967	970	972	969	964	962	960	962	966	971	974	971	973	972	970	969	965	964	963
20	939	916	937	951	958	959	964	966	966	966	964	964	965	965	965	970	976	984	987	993	925	906	939	944	957
21	966	971	973	970	966	966	968	969	969	970	968	963	961	960	960	964	971	977	1025	1006	985	975	970	965	972
22 q	966	968	969	965	963	966	967	968	970	970	967	965	965	970	972	972	971	971	969	967	968	970	970	970	968
23 q	970	968	965	959	960	963	963	966	968	966	965	963	966	965	970	971	969	968	967	968	969	968	966	966	966
24	967	967	966	965	963	963	965	965	963	964	957	953	955	960	966	968	982	987	981	973	968	972	972	965	967
25	922	939	956	963	962	963	963	964	964	963	959	959	961	965	965	965	986	1002	981	969	966	965	963	928	962
26 d	766	793	873	913	910	870	880	908	937	948	963	957	956	980	1040	1107	1110	1031	1045	1002	971	955	905	808	943
27	863	909	924	934	951	963	963	964	960	960	971	968	973	981	986	1015	1009	992	976	961	949	953	869	884	953
28 d	913	937	927	932	938	945	948	955	943	937	937	968	962	1035	1033	982	973	971	966	965	964	965	966	970	960
29	973	972	973	974	971	971	964	960	965	966	974	972	969	974	983	996	992	979	974	973	969	960	947	944	971
30 q	954	963	969	969	970	972	973	973	972	970	967	964	962	967	972	977	980	977	974	971	970	968	966	966	969
31 q	962	967	968	971	972	972	973	974	972	971	968	964	961	962	967	972	976	978	974	970	967	953	933	928	966
Mean	*923*	927	936	945	951	953	955	959	961	963	964	964	964	969	979	989	996	*1001*	1000	982	964	954	939	929	961

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −6γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

15 LERWICK — MARCH 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	5 18	388	347	10 43	41	13 0	38·1	29·5	8 27	*8·6*	15 29	972	954	3 26	18	1,1,0,1,1,1,0,0	5	0	78·5
2	21 35	395	348	13 7	47	13 30	41·7	28·0	16 30	13·7	16 30	1000	952	23 55	48	0,0,1,1,2,3,1,0	8	0	77·7
3	1 22	408	352	12 54	56	13 32	39·2	21·6	2 36	17·6	18 22	998	904	2 7	94	3,2,2,2,1,2,2,1	15	1	77·0
4 q	23 16	403	362	11 39	41	13 57	38·3	26·0	23 32	12·3	20 48	974	928	24 0	46	1,0,1,1,1,1,1,3	9	0	76·7
5	17 50	575	307	20 44	268	17 3	52·7	0·8	21 1	51·9	18 29	*1227*	918	0 47	309	2,1,1,1,2,5,6,5	23	1	77·0
6	16 48	399	283	20 25	116	20 20	51·9	8·4	19 50	43·5	17 38	1038	903	23 58	135	3,1,2,2,2,4,5,3	22	1	77·2
7	15 54	400	348	9 21	52	14 2	39·5	21·4	0 0	18·1	17 43	994	905	0 0	89	3,1,1,2,1,2,2,1	13	0	77·3
8	14 36	412	318	4 2	94	12 13	46·3	27·0	3 19	19·3	16 51	1092	877	4 25	215	3,4,2,3,3,4,2,0	21	1	78·0
9	16 28	394	355	22 25	39	13 20	37·3	21·2	19 52	16·1	19 19	1008	875	22 49	133	0,1,1,1,0,2,3,4	12	1	78·0
10	22 19	397	359	11 26	38	13 50	37·7	18·3	23 49	19·4	9 27	969	931	0 0	38	2,0,1,1,1,1,0,3	9	0	79·0
11 d	17 48	608	186	1 24	422	16 30	47·5	10·1	1 3	37·4	18 2	1169	762	0 42	407	5,5,2,3,5,6,5,2	33	2	79·3
12 d	17 19	*680*	12	22 6	*668*	19 36	*71·4*	-35·0	21 26	106·4	17 19	1181	693	22 18	488	2,2,2,4,4,6,7,7	34	2	79·5
13	0 44	387	341	11 43	46	13 5	39·1	21·9	0 23	17·2	12 1	1002	854	0 0	148	4,1,1,2,2,2,2,0	14	0	79·2
14	20 55	397	326	23 15	71	11 42	38·9	11·6	22 43	27·3	16 19	1003	905	24 0	98	0,1,2,1,2,2,4,3	15	1	79·1
15 d	17 15	476	*-141*	2 21	617	22 9	69·7	*-39·3*	2 4	*109·0*	17 42	1126	*582*	2 13	*544*	7,5,3,3,3,5,6,6	38	2	79·0
16	15 0	437	54	0 26	383	22 50	44·2	13·5	17 35	30·7	17 19	1076	748	0 19	328	6,3,2,2,3,4,3,4	27	1	79·1
17	22 56	405	329	2 12	76	13 36	41·7	22·4	20 39	19·3	17 51	992	898	23 20	94	3,2,2,1,1,2,3,3	17	1	79·1
18	21 11	420	339	13 24	81	13 8	43·2	25·2	22 10	18·0	17 47	1002	908	23 30	94	2,2,1,2,3,2,3,3	18	1	80·0
19	17 49	391	347	12 24	44	12 55	40·3	24·5	0 25	15·8	16 12	975	915	0 0	60	3,1,1,1,1,1,1,2	11	0	79·9
20	19 44	416	207	20 46	209	12 28	40·1	-10·3	20 57	50·4	19 50	1003	860	21 5	143	3,1,0,0,1,1,5,5	16	1	80·1
21	18 45	500	349	11 12	151	12 32	40·8	0·4	18 55	40·4	18 45	1077	957	0 0	120	2,2,1,1,1,2,5,1	15	1	80·0
22 q	20 58	390	353	10 52	*37*	11 45	39·1	29·2	8 12	9·9	15 30	973	960	3 52	*13*	1,1,0,1,0,0,0,0	3	0	80·0
23 q	21 12	394	344	10 40	50	12 40	39·9	29·9	8 15	10·0	15 20	972	957	4 2	15	1,1,0,0,0,0,0,1	3	0	80·5
24	15 44	405	336	10 2	69	16 31	45·2	28·1	22 52	17·1	17 0	992	949	24 0	43	0,0,1,2,2,3,2,2	12	1	81·0
25	16 25	417	282	23 52	135	23 54	62·8	29·0	1 16	33·8	17 8	1014	776	24 0	238	3,1,0,0,2,3,2,5	16	1	81·1
26 d	16 10	503	249	23 2	254	15 35	48·8	-1·7	19 18	50·5	16 22	1154	739	0 14	415	5,3,4,4,4,4,5,5	34	2	81·1
27	18 39	459	268	23 4	191	22 51	56·8	7·2	19 15	49·6	15 34	1030	814	0 10	216	4,3,2,3,3,3,4,5	27	1	80·9
28 d	13 44	494	245	11 17	249	13 44	52·0	25·9	5 25	26·1	13 55	1121	891	0 0	230	3,3,4,5,5,3,2,2	27	1	80·9
29	14 13	400	301	10 22	99	11 22	43·0	22·1	21 16	20·9	15 30	1000	940	23 39	60	1,2,2,2,3,2,2,3	17	1	80·7
30 q	14 57	388	336	11 29	52	12 30	40·7	27·2	8 24	13·5	16 24	982	950	0 5	32	2,1,1,1,2,1,0,0	8	0	80·6
31 q	21 3	403	348	10 37	55	13 2	40·0	22·0	23 23	18·0	16 58	981	924	23 5	57	1,0,0,0,1,2,1,3	8	0	80·2
Mean	- -	437	284	- -	153	- -	45·4	15·0	- -	30·4	- -	1035	875	- -	160	-	17·1	0·77	79·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

16 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	380	378	378	379	385	374	324	309	282	275	337	353	411	492	447	369	369	373	372	373	357	317	363	374	365
2	366	296	330	359	363	357	369	363	361	348	339	343	341	341	357	373	391	373	391	378	378	377	378	375	360
3	376	376	376	361	374	375	373	368	361	353	353	352	360	369	378	373	373	373	377	379	379	381	382	379	371
4	380	381	381	380	382	385	383	377	366	351	343	342	355	388	401	385	363	374	380	381	382	381	380	382	375
5	382	384	386	386	388	388	388	385	378	371	363	348	348	365	366	371	399	404	373	389	287	317	375	376	372
6 d	373	373	370	371	378	382	378	364	359	343	345	357	349	352	382	401	395	421	395	383	387	387	386	366	375
7	345	379	372	326	343	348	349	358	365	353	345	339	346	357	359	375	383	386	391	391	391	383	380	358	363
8	341	295	334	358	382	385	379	370	353	331	339	337	357	386	372	408	390	404	387	384	384	382	387	382	368
9 q	382	377	370	369	374	379	378	370	360	347	344	344	352	363	373	378	386	386	387	391	389	389	387	387	373
10	386	384	382	382	387	389	387	378	365	352	351	353	361	359	373	372	385	387	388	387	388	390	391	396	378
11 d	398	399	399	400	398	400	397	391	385	349	348	382	401	420	433	413	394	381	379	376	370	322	300	323	377
12 d	275	179	239	300	310	339	368	357	345	351	342	344	353	369	375	412	421	396	392	390	411	370	339	362	*347*
13	339	369	373	367	345	350	378	352	338	344	344	346	356	361	379	376	375	387	408	398	399	372	374	379	367
14 d	373	340	301	321	374	378	374	365	356	337	343	353	361	366	380	386	398	439	418	404	375	348	320	366	366
15	364	352	366	365	375	368	342	352	357	350	346	333	348	349	362	382	377	389	392	391	395	393	382	382	367
16	383	377	371	377	377	376	373	360	360	351	347	344	347	357	371	378	395	392	399	388	388	384	385	386	374
17 q	378	384	376	379	378	373	376	374	366	357	348	344	352	363	372	375	387	391	394	392	391	391	391	390	376
18	390	387	383	381	382	379	379	378	375	359	352	345	349	357	374	382	387	392	396	400	395	385	386	387	378
19	386	388	379	382	385	395	393	386	376	369	369	360	349	361	381	379	387	395	407	412	417	399	392	385	385
20	392	378	362	382	392	396	393	386	385	375	366	356	368	370	377	378	387	387	392	394	391	385	386	384	382
21	388	386	383	384	385	385	383	377	369	359	353	351	355	364	370	378	382	392	398	395	392	396	392	386	379
22	374	380	383	384	385	384	378	374	367	361	357	353	353	361	370	376	397	404	401	407	405	379	386	390	380
23	390	390	387	386	388	392	388	385	377	369	361	349	356	362	385	411	377	380	386	395	402	394	392	385	383
24	388	354	352	390	384	377	362	348	362	359	356	355	370	379	388	388	399	405	425	400	387	386	388	388	379
25	387	387	372	374	383	385	382	372	360	364	365	357	360	373	378	385	390	394	390	392	389	386	391	386	379
26 q	386	383	383	384	384	385	382	376	368	362	361	365	376	386	402	382	386	392	390	391	391	392	391	394	383
27 q	394	390	387	386	382	382	383	380	372	361	356	356	359	369	373	382	387	392	391	394	392	398	394	391	381
28 q	388	388	389	389	387	386	383	375	367	356	353	355	360	368	375	385	386	393	396	394	394	394	400	399	382
29	398	398	394	391	390	388	388	382	375	367	356	355	356	369	393	378	386	398	403	412	416	409	408	400	*388*
30	397	392	385	383	387	391	386	383	378	373	351	364	366	370	369	375	394	440	400	413	404	402	397	394	387
Mean	376	367	368	373	378	379	377	370	363	353	351	*351*	359	372	381	384	388	*394*	393	392	388	380	380	381	375

Corrections to be applied to all values: H, −6γ: D, −4·3′: V, −6γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

17 LERWICK (D) — 11° + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	29·1	30·8	28·2	29·0	28·9	37·3	40·1	28·3	34·0	37·4	39·5	38·3	46·2	40·2	40·4	41·1	37·8	31·0	31·3	32·0	26·3	30·0	26·3	24·9	33·7
2	24·9	32·9	24·3	26·1	28·4	30·0	29·7	28·4	28·1	30·3	31·9	35·8	37·8	38·0	36·6	35·2	32·8	29·7	28·6	33·0	33·2	33·3	33·2	32·9	31·5
3	32·7	32·9	33·0	35·0	31·2	29·4	29·0	28·2	28·3	30·0	32·3	35·1	36·9	36·8	36·3	35·0	34·0	34·0	33·9	33·6	32·8	32·5	32·2	32·1	32·8
4	32·0	31·8	31·6	31·1	31·3	30·7	29·1	27·4	27·2	29·1	31·3	35·0	38·1	41·0	37·4	36·2	35·3	34·6	35·0	34·0	33·1	32·7	32·2	32·3	32·9
5	32·2	32·1	31·9	31·6	31·3	31·3	30·6	29·3	29·3	30·2	32·7	36·6	36·7	36·9	35·6	34·2	33·2	40·6	39·3	34·7	30·5	21·7	24·9	29·9	32·8
6 d	31·8	32·2	32·3	32·2	27·3	27·3	27·0	29·0	29·8	32·6	34·0	36·2	40·3	37·9	37·0	40·9	38·3	18·2	28·6	34·1	34·9	33·8	33·3	35·2	32·7
7	38·1	28·6	27·0	31·1	33·0	33·2	32·1	31·9	29·1	31·1	32·2	34·8	37·2	37·9	37·8	36·3	35·9	34·3	34·1	34·1	33·9	33·6	30·9	21·7	32·9
8	20·0	27·3	24·8	25·9	28·1	30·3	30·9	31·6	31·1	32·5	34·9	38·0	40·1	42·2	39·2	37·0	33·9	33·6	34·0	33·1	32·9	32·1	32·7	33·2	32·5
9 q	34·1	33·3	34·7	33·9	30·0	29·3	28·9	27·8	26·8	29·0	31·4	34·3	36·8	37·9	36·9	35·1	33·6	32·9	32·9	33·0	32·6	32·9	32·7	32·2	32·6
10	32·4	33·0	33·4	33·5	31·1	30·3	29·1	27·8	26·7	29·0	32·4	36·2	39·3	39·7	38·6	36·6	35·1	34·3	33·7	33·7	33·9	33·5	33·1	32·7	33·3
11 d	32·5	32·3	32·1	30·3	29·2	29·0	27·0	26·6	26·2	26·2	33·0	41·2	46·7	41·1	47·0	45·2	35·7	35·7	31·2	30·5	25·0	27·7	30·5	39·9	*34·1*
12 d	22·2	21·2	36·5	25·8	24·8	29·4	30·2	28·1	30·1	30·3	35·0	37·1	39·0	38·6	38·0	33·9	25·8	30·9	36·1	34·0	30·1	32·0	23·6	21·1	30·6
13	24·5	29·8	30·9	30·2	31·0	30·5	31·0	34·1	36·1	34·5	34·4	37·1	37·8	38·8	39·2	36·8	35·3	35·9	35·8	34·2	29·3	26·3	28·2	31·2	33·0
14 d	30·0	29·0	38·7	33·4	28·3	27·3	26·8	26·7	27·0	28·5	32·4	36·0	40·1	39·8	39·1	37·9	33·3	29·2	30·2	27·3	30·9	30·3	25·9	27·0	31·5
15	32·8	39·6	30·1	28·5	27·2	27·9	31·2	33·1	28·3	30·3	33·4	37·2	39·8	41·2	40·8	39·9	36·0	34·3	32·6	32·0	29·0	28·0	30·3	31·7	33·1
16	32·1	32·7	33·5	31·8	20·9	29·5	28·2	27·5	28·1	30·3	33·2	36·2	39·4	40·6	38·8	37·0	35·9	33·2	33·6	31·9	30·5	32·1	32·2	33·7	33·0
17 q	34·8	30·6	31·8	30·4	28·2	29·2	29·0	28·4	28·6	30·0	32·8	34·7	36·3	37·2	36·9	35·8	34·6	34·2	33·7	32·9	33·2	32·8	32·1	32·6	32·5
18	32·5	32·1	32·2	32·8	30·7	26·9	26·9	27·2	28·9	31·0	33·4	37·1	39·2	39·1	38·2	36·2	34·6	33·6	32·9	33·1	33·2	33·1	31·0	33·1	32·9
19	29·1	30·9	25·2	22·3	21·5	22·2	24·3	26·6	28·9	31·4	34·2	37·9	40·8	40·7	39·0	36·2	35·5	34·3	34·5	34·3	34·4	28·2	17·1	26·4	30·7
20	30·9	37·2	33·2	27·2	26·0	26·6	30·0	32·0	31·0	32·3	35·0	37·7	39·5	40·9	39·0	36·2	34·1	32·2	31·9	31·3	31·4	31·3	31·3	31·9	32·9
21	33·4	33·1	31·6	29·3	29·1	28·9	27·9	27·8	27·6	28·7	30·3	33·0	35·8	36·3	35·8	34·9	34·3	33·2	32·8	32·8	32·8	32·8	30·6	26·9	31·7
22	29·0	31·0	30·1	29·2	28·1	27·8	27·1	26·4	26·6	29·2	32·4	35·2	38·2	38·8	37·2	35·1	34·3	33·3	29·5	29·2	15·5	21·4	27·3	30·3	*30·1*
23	31·7	31·8	31·0	32·5	29·0	26·9	25·8	26·5	28·0	30·3	33·1	37·2	40·1	39·1	38·6	40·2	37·9	31·9	31·9	31·8	31·3	31·0	27·8	25·7	32·1
24	33·2	39·1	34·9	23·1	25·5	26·3	28·4	30·0	29·8	31·9	34·8	37·4	38·9	38·9	36·9	37·1	35·9	33·0	18·8	24·1	27·2	29·7	30·1	31·2	31·5
25	32·1	32·6	35·8	32·0	27·3	27·5	27·3	29·5	33·4	31·9	32·3	35·0	37·5	37·9	36·0	33·2	32·1	31·4	31·0	31·3	31·8	32·1	31·9	31·1	32·3
26 q	31·4	31·2	31·0	30·8	30·0	28·9	27·1	26·9	27·1	29·9	33·2	36·2	38·8	38·0	38·8	33·2	31·3	30·5	30·8	31·4	31·9	32·1	32·5	32·1	31·8
27 q	32·2	31·9	33·4	33·0	28·2	27·1	26·7	26·4	27·1	28·2	30·1	32·8	35·9	37·9	37·0	35·6	34·0	32·1	31·4	31·5	31·7	31·7	32·1	32·3	31·7
28 q	32·1	32·0	31·9	31·7	30·9	29·2	28·1	27·6	27·6	27·7	29·5	33·0	37·3	37·1	36·1	35·3	33·6	32·0	30·5	30·9	31·6	32·0	32·4	32·5	31·8
29	32·5	33·3	32·1	30·2	28·8	27·4	26·4	25·9	26·3	29·0	32·2	34·8	37·3	39·0	40·1	38·0	38·1	36·2	34·2	34·3	34·1	33·6	33·4	31·8	33·1
30	32·1	32·4	31·3	31·2	29·9	28·2	28·3	29·1	28·0	29·2	32·3	34·3	36·0	37·9	38·0	36·9	36·0	35·6	31·4	32·4	33·2	32·7	27·0	31·3	33·0
Mean	30·9	32·0	31·6	30·2	28·8	28·9	28·8	*28·5*	28·8	30·4	33·0	36·0	38·8	*38·9*	38·1	36·7	34·6	32·9	32·2	32·2	31·1	30·9	30·0	30·7	32·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes at exact hours, G.M.T.

18 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	933	932	935	953	956	934	917	923	933	959	1018	1004	1019	1081	1122	1096	1047	1021	998	987	974	896	917	925	978
2	924	882	814	888	936	955	959	966	972	976	973	967	977	980	983	986	1004	1021	1009	993	982	976	972	971	961
3	971	970	967	966	965	971	973	974	973	973	973	968	964	964	966	971	972	971	972	972	973	972	972	971	970
4	971	970	969	970	972	973	974	978	978	977	970	962	961	968	1002	1021	1014	994	977	975	973	973	973	972	978
5	971	970	970	971	971	971	972	975	976	974	973	974	971	968	972	976	982	1005	1032	1025	910	889	951	966	971
6 d	972	967	963	961	957	966	973	974	975	979	986	981	977	989	985	1001	1025	1049	1013	990	978	975	973	930	*981*
7	860	891	905	905	903	915	936	956	967	973	974	973	972	975	975	975	974	976	973	977	977	957	864	892	944
8	846	784	837	888	927	950	959	963	970	977	977	979	981	989	1003	1000	1006	993	981	977	976	976	972	961	953
9 q	960	961	957	952	956	965	969	973	972	973	973	972	969	971	973	972	973	975	973	972	973	972	972	973	969
10	973	973	968	964	966	967	967	967	965	962	962	963	968	977	979	975	970	968	968	967	965	966	968	967	968
11 d	969	972	970	965	965	963	961	958	952	953	946	946	1009	1056	1019	1060	1045	1019	1019	1002	989	913	801	858	971
12 d	774	793	847	851	897	898	913	949	963	975	974	969	974	978	980	990	1018	1017	996	992	934	872	899	868	*930*
13	875	921	957	965	958	926	931	943	943	947	955	964	980	977	975	984	985	985	995	1008	991	967	942	931	959
14 d	920	899	882	875	933	961	970	974	973	947	970	963	992	978	985	991	996	1012	1029	1010	990	924	854	894	955
15	930	899	926	931	953	962	956	941	946	954	957	970	984	984	980	983	984	981	987	988	982	973	972	968	962
16	966	967	967	970	969	976	978	980	975	968	964	964	964	966	970	974	978	989	989	990	985	979	974	962	973
17 q	941	946	960	964	970	973	969	971	974	973	970	967	964	966	970	975	977	978	982	983	982	979	975	972	970
18	970	968	967	965	963	969	970	968	967	966	967	967	964	965	967	971	974	977	979	980	982	984	974	947	970
19	952	953	954	955	956	948	948	949	950	952	952	953	955	953	955	963	968	971	971	969	982	996	959	941	959
20	942	925	879	902	940	952	953	954	956	960	965	970	986	996	1013	1000	977	974	971	973	974	974	971	971	962
21	965	963	964	967	969	970	970	970	968	976	976	975	972	972	976	978	980	979	978	978	976	976	976	965	972
22	953	963	973	976	976	977	978	975	975	973	973	973	970	965	963	968	971	981	997	997	991	972	973	974	974
23	975	972	973	973	969	973	973	971	968	967	968	970	966	964	965	970	992	1001	993	983	973	978	959	950	973
24	946	938	890	906	931	950	956	955	956	956	955	958	958	961	966	972	980	990	1007	991	984	976	969	958	959
25	956	949	943	939	960	966	969	970	969	964	963	960	961	966	976	983	982	978	976	972	975	975	967	970	966
26 q	971	976	976	977	976	976	974	975	970	966	963	958	956	965	974	988	987	983	979	974	971	971	971	970	973
27 q	971	972	973	966	972	976	972	971	971	966	961	958	961	966	968	971	974	977	977	974	972	971	971	971	970
28 q	973	975	977	978	980	980	982	978	975	974	972	964	961	967	973	973	975	978	978	977	972	969	967	967	974
29	968	968	970	975	978	977	975	967	967	963	958	952	955	960	967	979	982	985	982	973	970	970	967	968	970
30	968	970	973	975	973	970	970	964	960	958	956	950	954	960	963	966	967	978	1018	999	988	977	968	964	970
Mean	942	*940*	940	946	957	960	962	964	965	966	968	966	971	978	982	987	989	*990*	990	985	975	962	951	950	966

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −6γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

19 LERWICK — APRIL 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	12 57	*577*	250	9 24	327	12 44	53·8	14·1	21 41	39·7	14 30	*1139*	860	21 29	279	2,3,4,5,5,4,5,4	32	2	80·1
2	18 12	401	220	2 6	181	1 25	44·8	22·1	2 1	22·7	17 45	1029	772	2 8	257	5,4,2,1,1,3,3,0	19	1	80·2
3	22 19	383	349	3 13	*34*	3 26	38·1	27·2	8 11	10·9	3 8	976	961	13 0	*15*	1,2,1,1,0,1,0,0	6	0	80·0
4	14 37	426	339	11 42	87	13 40	42·1	26·0	7 47	16·1	15 2	1026	961	12 29	65	0,0,1,1,3,3,1,0	9	1	79·5
5	20 15	544	*-111*	20 38	*655*	20 37	*89·6*	10·6	20 12	*79·0*	20 8	1042	*628*	20 35	*414*	0,0,0,2,2,3,7,5	19	1	79·1
6 d	17 32	468	314	9 24	154	15 20	43·0	*2·5*	17 29	40·5	17 29	1081	869	23 58	212	2,3,3,3,3,5,3,4	26	1	79·1
7	22 24	429	304	3 39	125	22 5	44·8	12·7	23 21	32·1	19 39	980	848	22 16	132	3,3,3,1,2,2,1,4	19	1	79·3
8	15 30	417	237	1 24	180	13 28	43·7	13·9	0 53	29·8	16 48	1011	762	1 32	249	4,4,2,2,3,3,0,2	20	1	80·0
9 q	19 43	494	441	10 49	53	13 49	38·1	26·1	8 16	12·0	17 47	976	950	4 0	26	1,1,0,0,0,0,0,0	2	0	80·2
10	23 52	401	350	10 34	51	13 11	40·3	26·4	8 24	13·9	14 28	979	960	3 34	19	1,1,0,1,2,1,0,1	7	0	80·9
11 d	14 47	486	197	22 5	289	12 40	55·2	12·3	22 9	42·9	13 11	1109	719	22 18	390	0,1,2,4,5,3,3,5	23	1	81·0
12 d	16 21	452	100	1 50	352	20 57	43·0	12·1	23 22	30·9	17 0	1032	736	1 20	296	5,4,3,2,2,3,4,4	27	1	80·5
13	18 19	413	322	0 23	91	14 8	40·0	21·4	21 20	18·6	19 12	1015	862	0 17	153	4,3,3,2,1,2,3,3	21	1	80·0
14 d	17 44	457	244	2 54	213	2 50	51·7	9·6	22 28	42·1	18 36	1039	822	22 48	217	5,4,1,2,2,3,4,5	26	1	79·8
15	21 16	404	319	11 45	85	1 14	44·8	24·4	21 9	20·4	18 33	989	879	1 39	110	3,2,3,2,2,2,2,2	18	1	80·0
16	16 32	401	341	11 5	60	13 32	41·0	27·1	7 26	13·9	19 50	995	851	24 0	44	1,1,1,1,1,2,2,2	11	0	80·1
17 q	19 29	397	342	11 40	55	13 10	37·4	27·4	4 50	*10·0*	19 48	985	936	0 38	49	2,1,0,1,0,1,0,0	5	0	81·1
18	19 32	400	341	11 25	59	12 32	39·8	25·9	6 4	13·9	21 35	985	941	23 40	44	0,2,2,1,1,0,0,3	9	0	81·1
19	19 55	430	326	12 32	104	13 0	42·9	12·0	22 40	30·9	21 37	1001	928	22 47	73	2,1,2,1,2,2,2,4	16	1	82·2
20	19 10	407	345	11 51	62	1 57	44·0	23·9	3 32	20·1	14 46	1024	861	2 17	163	4,3,2,2,3,3,1,0	18	1	82·2
21	18 19	401	350	11 40	51	12 50	37·0	25·1	23 12	11·9	16 30	981	949	24 0	32	1,0,0,0,1,1,0,2	5	0	82·0
22	20 37	423	349	12 7	74	13 17	39·3	5·4	20 27	33·9	19 44	1004	949	0 4	55	2,0,0,1,0,2,4,3	12	1	81·2
23	15 32	433	340	11 37	93	15 33	41·7	15·2	22 59	26·5	17 21	1008	944	23 8	64	1,2,2,2,3,4,2,4	20	1	80·4
24	18 49	452	333	2 11	119	1 35	44·7	9·5	18 34	35·2	18 30	1019	881	2 39	138	3,3,2,3,2,2,4,2	21	1	80·2
25	22 2	399	352	11 29	47	2 41	39·0	26·8	6 18	12·2	15 51	987	926	2 58	61	2,2,2,2,2,1,0,1	12	0	80·0
26 q	14 25	409	360	10 13	49	13 3	39·9	26·4	7 3	13·5	15 50	992	954	12 12	38	0,0,0,1,2,2,1,0	6	0	80·1
27 q	21 16	401	353	11 7	48	13 40	38·3	25·8	5 53	12·5	18 10	978	957	11 29	21	2,2,0,1,0,0,0,0	5	0	80·0
28 q	22 29	401	350	12 4	51	12 43	38·6	27·2	8 55	11·4	6 50	982	960	12 40	22	0,0,0,1,1,1,0,0	3	0	79·8
29	20 11	421	353	10 42	68	14 20	40·9	25·4	7 53	15·5	18 3	989	951	12 2	38	1,1,0,1,2,2,2,1	10	0	79·1
30	17 9	460	334	10 40	126	14 11	39·0	22·9	22 20	16·1	18 33	1028	944	11 23	84	1,1,2,3,2,4,3,3	19	1	78·1
Mean	- -	433	301	- -	131	- -	42·6	19·6	- -	24·3	- -	1013	884	- -	125	-	14·9	0·63	80·3

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

20 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	378	347	362	385	383	383	379	374	365	356	347	340	362	378	374	387	395	405	412	424	407	393	392	391	380
2 d	385	391	367	350	392	384	375	372	356	351	348	353	370	356	380	392	396	399	399	396	396	391	391	387	378
3	380	383	372	381	369	374	378	380	369	350	343	353	365	379	373	387	434	405	404	399	396	395	369	368	379
4	384	381	385	383	383	381	374	370	361	360	358	360	357	358	368	379	390	401	397	404	398	389	399	386	379
5 q	383	382	381	381	384	384	380	381	374	369	363	373	377	391	404	380	384	394	394	391	391	392	383	383	383
6	386	383	379	380	383	383	385	383	378	370	365	366	370	377	405	404	423	426	400	395	387	385	384	385	387
7 q	383	383	383	383	382	381	376	370	367	365	367	367	370	375	385	387	392	397	403	405	403	394	384	386	383
8 q	382	383	378	378	387	383	376	369	362	361	365	368	370	365	368	375	384	391	399	408	400	397	393	391	381
9	389	390	389	387	384	383	377	373	370	371	374	375	387	380	382	409	380	422	430	424	396	383	370	363	387
10	370	374	374	377	379	377	374	368	361	354	355	358	373	390	387	399	413	425	438	428	416	422	388	381	387
11 d	380	380	379	382	374	355	370	383	377	340	340	349	352	377	400	424	459	435	411	409	383	370	373	374	382
12 d	370	357	335	325	330	361	361	352	349	351	353	352	359	365	378	396	409	421	425	411	397	370	364	373	*369*
13	374	374	372	374	378	372	362	361	362	361	361	361	373	371	376	376	396	427	426	413	400	388	384	366	379
14	378	377	378	378	377	378	374	369	370	363	351	349	355	373	409	396	416	413	400	396	396	383	379	373	380
15 q	377	377	375	374	377	378	374	370	363	355	347	345	349	359	379	385	393	400	396	395	391	392	395	380	376
16	380	374	379	383	380	385	379	375	368	363	357	360	367	374	379	384	391	408	396	405	404	391	387	388	382
17	370	377	373	381	378	382	380	381	370	354	352	359	368	375	378	392	399	416	427	410	401	396	383	387	383
18	396	383	381	386	385	385	383	385	382	367	366	364	370	376	367	396	406	420	417	403	404	399	401	389	388
19	383	363	387	390	390	389	385	375	366	361	355	352	363	370	390	392	404	416	432	419	404	396	387	387	387
20	380	386	385	387	374	366	360	365	361	352	353	347	351	357	374	400	395	411	409	409	401	396	395	393	379
21	392	388	392	394	393	390	379	369	357	349	348	356	370	380	428	411	404	410	404	400	393	394	388	386	386
22 q	389	387	389	391	391	388	381	371	361	353	339	345	355	373	388	387	404	412	408	395	391	390	392	387	382
23	391	399	400	400	400	390	357	367	370	352	329	346	351	352	365	385	392	404	409	407	407	399	396	392	382
24	395	383	388	387	371	383	378	357	343	348	352	354	367	375	384	380	393	399	400	396	392	394	391	392	379
25 d	391	392	395	367	383	397	378	374	367	352	339	334	352	373	393	396	407	417	418	418	423	409	394	392	386
26	400	394	394	394	394	391	387	379	364	354	348	348	359	371	383	396	396	401	413	410	407	405	401	399	387
27	395	391	390	387	382	377	370	367	362	353	355	361	374	381	377	390	428	427	425	423	412	400	395	397	*388*
28	394	391	389	387	384	379	371	360	352	343	341	342	353	373	388	400	420	401	413	419	415	408	404	403	385
29	400	387	388	396	396	386	380	377	364	348	346	353	365	380	392	399	404	426	426	408	403	397	396	388	388
30 d	389	374	386	384	385	386	381	363	354	342	346	352	351	377	371	374	411	409	412	426	422	404	391	374	382
31	361	395	390	384	388	385	378	357	339	348	357	354	374	374	392	406	385	415	403	398	393	391	389	387	381
Mean	384	382	381	381	382	381	376	371	363	355	*352*	355	364	373	384	392	403	*411*	411	408	401	394	388	385	382

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -5γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

21 LERWICK (D) — 11° + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·9	37·0	31·0	27·9	27·1	27·1	27·2	27·9	28·4	29·7	33·2	37·4	40·0	40·1	38·7	36·2	34·6	34·0	33·3	33·0	28·0	30·9	32·1	32·0	32·6
2 d	32·0	32·7	31·9	35·8	37·9	28·2	25·2	26·7	28·7	29·9	33·4	34·3	36·8	36·3	35·0	34·5	34·0	33·9	33·6	33·0	33·0	33·1	32·3	32·2	32·7
3	34·1	31·6	24·9	27·3	26·8	27·1	27·0	27·4	28·2	31·4	35·0	36·2	36·4	37·1	36·7	35·0	34·6	33·0	32·5	32·5	30·3	33·2	31·1	28·1	31·6
4	31·7	31·6	30·4	29·0	26·9	25·8	25·8	27·1	28·3	31·0	31·8	32·9	34·3	35·0	35·3	35·1	34·2	33·6	33·1	29·2	29·3	30·8	33·9	32·4	31·2
5 q	31·3	31·9	31·1	31·0	28·3	29·0	31·1	30·9	28·9	30·2	32·0	34·5	36·5	37·1	37·2	35·0	34·2	33·8	32·8	31·9	32·0	29·0	30·9	31·7	32·2
6	32·0	31·3	30·8	30·3	29·7	29·0	27·8	28·4	29·1	31·0	32·2	34·2	35·9	34·4	33·0	32·6	33·3	32·1	32·9	33·6	33·3	33·1	33·0	32·6	31·9
7 q	32·0	31·5	31·0	30·1	29·0	27·4	27·1	27·4	29·0	31·1	32·0	33·3	34·1	34·4	35·0	35·0	34·4	33·4	33·3	31·0	32·4	32·9	27·2	27·2	31·3
8 q	26·6	25·5	26·0	25·1	24·3	24·3	24·4	25·2	28·0	30·3	33·2	35·8	37·3	36·8	35·9	35·1	35·1	35·0	33·4	32·9	32·3	32·6	32·0	31·8	30·8
9	31·5	30·8	29·0	28·0	28·5	28·2	28·9	29·7	31·0	33·5	35·0	36·7	38·9	38·7	38·5	39·3	35·6	36·3	36·3	29·2	27·8	19·2	24·3	28·7	31·8
10	26·4	27·0	25·2	23·8	25·8	27·9	26·9	27·9	29·2	32·1	34·9	37·4	39·9	42·1	41·7	41·1	40·0	38·5	37·9	33·0	31·4	14·5	18·3	24·3	31·1
11 d	27·3	27·7	25·6	26·2	25·6	33·6	33·0	27·8	27·1	30·5	33·6	37·7	40·1	42·2	45·6	43·6	40·9	34·5	33·0	31·4	24·1	25·6	30·3	31·7	32·4
12 d	31·5	26·4	20·9	27·8	31·9	25·1	24·1	25·5	26·6	27·9	30·7	34·5	37·6	39·1	38·8	36·2	36·0	34·9	32·5	30·3	23·1	19·9	25·7	26·9	*29·7*
13	24·5	25·5	27·0	26·9	27·5	26·7	25·1	25·0	26·6	29·1	32·3	36·4	39·7	39·1	37·4	36·2	34·8	28·7	32·9	32·3	29·9	30·5	27·9	29·4	30·5
14	29·9	27·6	28·1	28·0	28·9	28·4	27·9	28·1	29·1	30·8	34·2	37·1	39·2	39·4	43·0	40·8	34·1	36·1	34·0	33·4	32·7	29·3	29·1	34·7	32·7
15 q	31·2	30·2	30·0	29·9	30·0	28·0	26·4	26·1	26·5	28·7	31·0	33·9	36·6	37·3	37·3	35·4	33·4	31·5	31·2	32·0	31·9	32·2	29·9	29·5	31·3
16	30·8	29·1	31·1	25·8	25·2	25·9	25·2	24·5	25·5	28·4	32·1	35·5	38·0	38·8	38·3	36·9	34·9	34·2	33·2	33·8	33·7	31·9	32·1	29·0	31·4
17	28·5	23·6	26·4	25·0	26·0	25·6	26·0	26·8	29·8	32·8	36·0	38·8	39·9	40·7	41·0	39·5	37·9	35·5	31·9	33·8	32·0	31·6	31·2	33·2	32·2
18	30·5	28·1	27·4	26·8	26·1	26·3	28·2	28·1	28·8	31·1	33·6	36·1	40·1	42·9	41·7	40·1	39·2	36·9	36·8	33·0	33·0	33·0	27·0	25·2	32·5
19	28·5	29·9	30·9	30·2	29·4	28·3	27·0	27·2	27·5	28·3	31·1	36·1	37·4	36·1	37·0	37·7	36·0	36·1	35·1	31·9	29·9	28·6	29·6	33·1	31·8
20	29·9	29·4	28·8	28·4	29·6	30·2	35·8	32·6	31·1	28·9	30·2	33·2	36·2	37·4	36·8	37·1	32·8	34·3	34·1	34·0	33·4	32·8	32·4	32·4	32·6
21	30·7	32·6	31·3	29·3	27·3	26·6	26·9	26·3	27·3	31·3	33·1	36·6	40·4	41·9	43·7	41·0	36·2	34·3	32·0	32·0	33·8	34·0	33·0	33·3	33·1
22 q	32·4	30·8	30·6	29·4	28·8	27·4	27·3	27·7	28·6	30·0	32·5	36·6	40·2	39·5	36·8	34·9	32·6	31·2	30·6	30·3	31·8	32·4	32·8	33·5	32·0
23	35·2	33·0	30·6	27·6	27·0	26·0	27·5	32·9	28·9	30·0	36·2	39·2	40·3	40·1	39·1	36·3	33·8	31·0	30·1	30·7	31·5	32·3	32·7	32·6	32·7
24	34·3	35·4	33·1	31·0	34·0	30·2	24·5	24·5	27·7	32·0	35·0	38·2	40·7	41·2	39·8	37·4	33·6	30·7	29·5	30·7	29·7	31·7	32·0	32·6	32·9
25 d	32·2	31·9	33·6	44·8	29·0	31·5	26·1	21·3	22·9	26·1	31·1	37·0	40·6	42·7	42·2	39·7	35·8	34·0	31·7	32·4	26·4	26·9	30·8	32·4	32·6
26	32·5	28·3	28·5	26·5	25·0	23·4	22·9	24·3	25·3	28·1	31·7	35·4	38·2	39·0	39·1	38·1	36·9	35·0	34·6	33·7	33·8	33·6	31·7	31·3	31·5
27	30·8	30·2	30·1	29·2	28·0	26·4	24·5	25·2	25·6	27·4	32·2	35·4	38·7	39·3	36·3	35·0	36·9	36·9	37·4	35·8	35·3	33·3	32·8	31·5	32·3
28	31·5	30·5	29·7	29·5	27·9	27·5	27·7	28·5	29·0	32·3	35·2	36·3	36·9	38·8	39·6	37·1	35·8	35·0	34·9	35·8	36·6	33·9	33·3	33·0	*33·2*
29	35·0	30·3	21·4	24·8	26·0	26·8	26·8	26·0	27·2	28·5	30·7	35·0	36·9	37·5	37·8	36·8	35·2	34·1	27·8	32·3	33·0	33·0	33·3	27·4	31·0
30 d	25·9	27·0	27·3	27·0	27·2	25·2	24·4	24·9	28·2	31·3	33·8	37·0	39·8	39·8	40·5	39·9	39·1	37·5	34·6	34·9	34·9	23·2	23·3	27·1	31·4
31	33·0	28·0	26·9	29·0	29·0	29·1	30·3	30·1	32·6	31·9	31·8	32·5	35·0	37·4	38·1	37·8	35·1	32·8	35·2	35·0	33·9	33·0	32·0	31·9	32·6
Mean	31·0	29·9	28·7	28·8	28·2	27·5	*27·1*	27·2	28·1	30·2	32·9	35·8	38·1	*38·8*	38·6	37·3	35·5	34·2	33·3	32·5	31·4	30·1	30·3	30·7	31·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

22 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	954	891	864	908	952	965	968	968	967	966	960	960	955	966	971	971	972	976	978	984	973	976	973	972	958
2 d	964	928	921	878	872	907	938	954	965	969	968	962	963	970	969	974	983	985	983	979	979	979	976	974	*956*
3	961	892	906	940	958	960	966	967	968	970	967	966	966	969	977	974	974	1003	996	996	994	978	963	939	965
4	953	962	969	974	968	970	973	971	971	966	963	964	966	970	973	973	973	974	979	982	979	971	949	951	969
5 q	964	967	970	972	972	970	972	970	973	971	968	967	972	979	989	996	990	980	979	981	980	979	977	976	976
6	975	974	977	978	976	976	976	977	976	977	976	972	972	972	975	985	995	1012	1016	995	985	980	979	978	981
7 q	977	977	977	979	978	976	976	975	974	971	970	971	970	971	970	969	970	974	974	978	979	978	980	968	975
8 q	951	952	956	952	954	960	965	965	962	960	961	962	962	965	967	966	969	970	970	970	976	976	975	975	964
9	975	974	973	973	972	970	967	964	960	955	953	949	947	956	957	958	981	969	984	992	985	939	925	942	963
10	954	962	963	961	962	965	966	967	965	963	961	962	960	958	967	975	992	1006	1021	1024	1005	937	890	918	967
11 d	948	960	965	972	972	948	916	931	947	958	963	973	982	1003	1031	1073	1072	1054	1027	1019	975	970	971	973	*983*
12 d	961	919	893	898	916	929	952	956	957	965	967	972	976	979	982	993	998	1004	1019	1024	1003	988	972	966	966
13	956	958	961	963	971	976	976	972	968	967	966	966	964	975	983	993	999	998	998	996	994	987	972	968	976
14	944	963	968	971	971	971	971	968	963	956	954	953	960	970	990	1021	1031	1009	997	987	981	981	971	949	975
15 q	943	962	969	972	972	974	977	977	975	968	965	960	958	959	965	973	977	981	984	981	978	977	965	963	970
16	960	959	955	945	965	970	975	977	973	972	970	962	960	964	968	966	970	977	982	976	980	983	977	963	969
17	947	944	953	959	952	950	951	954	957	959	944	944	947	957	968	976	980	987	994	993	989	983	979	954	963
18	924	933	949	954	962	962	957	953	953	954	955	957	959	963	971	977	999	995	977	978	976	971	942	919	960
19	945	963	965	963	968	971	973	974	970	966	967	967	966	968	976	987	1003	1004	1001	1003	995	983	968	963	975
20	933	959	967	969	966	955	956	955	964	972	974	973	968	968	968	977	1000	995	988	983	983	977	976	973	971
21	971	973	970	974	977	976	978	976	974	968	964	957	955	957	963	990	999	992	990	988	981	977	977	976	975
22 q	975	978	979	979	979	979	978	974	972	973	972	965	958	964	974	983	985	986	985	985	979	974	972	971	976
23	961	961	969	969	971	969	969	942	943	950	955	955	950	956	965	973	982	984	982	979	974	974	972	972	966
24	969	962	943	954	946	927	950	963	968	964	962	958	962	973	978	990	996	996	987	984	984	977	974	973	968
25 d	973	974	972	937	909	935	950	965	968	969	965	962	962	968	973	984	995	991	997	991	984	973	968	973	968
26	967	974	977	980	980	976	975	974	973	971	968	966	965	970	970	969	975	975	970	975	975	974	974	974	973
27	975	976	977	978	979	980	978	975	971	967	962	958	958	967	973	969	966	978	981	981	974	975	973	970	973
28	970	974	975	976	978	977	978	977	974	967	963	960	963	966	963	970	975	992	985	980	977	975	970	968	973
29	966	918	944	956	966	971	969	971	970	969	966	963	961	962	966	971	978	982	1003	996	986	977	972	964	969
30 d	939	948	954	964	973	976	977	978	977	969	963	956	954	954	971	975	976	998	1004	992	990	974	938	923	968
31	895	921	958	971	972	979	978	982	978	969	963	964	964	974	976	984	997	993	984	977	976	975	975	973	970
Mean	956	*953*	956	959	962	964	966	967	967	966	964	962	962	968	974	982	989	*991*	991	989	983	975	966	962	970

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −5γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

23 LERWICK — MAY 1945

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force										
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1	19 50	437	335	4 35	102	0 46	42·7	19·5	20 12	23·2	19 47	995	*849*	2 20	146	4,4,2,2,2,2,3,1	20	1	77·9
2 d	15 58	417	331	3 43	86	3 57	41·8	24·3	7 36	17·5	16 49	989	860	3 14	129	4,3,3,2,3,2,1,1	19	1	77·9
3	16 53	473	331	10 21	142	1 0	45·6	21·2	2 12	24·4	17 22	1010	874	1 36	136	4,2,2,2,2,2,4,2,3	21	1	78·5
4	22 22	418	353	10 32	65	15 10	35·8	24·3	1 10	11·5	19 33	985	935	22 52	50	2,1,1,1,1,1,2,3	12	0	79·0
5 q	14 27	416	362	10 18	54	14 10	38·1	26·1	21 28	12·0	15 7	999	959	0 4	40	1,1,2,1,2,2,1,2	12	0	79·8
6	17 53	449	361	11 30	88	12 45	36·6	27·2	6 12	*9·4*	18 16	1025	970	11 39	55	0,0,1,1,2,3,3,1	11	0	80·9
7 q	19 48	412	364	9 37	*48*	14 50	35·7	23·8	22 42	11·9	22 38	986	966	14 58	20	0,0,0,2,1,1,2,2	8	0	81·1
8 q	19 18	411	358	10 11	53	12 36	38·0	23·1	4 17	14·9	20 40	977	947	0 36	30	1,1,2,1,2,1,1,0	9	0	81·8
9	17 45	447	348	21 31	99	12 54	41·0	7·3	21 18	33·7	19 10	1008	904	21 58	104	1,1,2,2,3,3,3,4	19	1	81·9
10	21 24	459	351	9 13	108	14 1	43·6	*3·5*	21 56	*40·1*	19 27	1029	880	22 36	149	2,2,1,1,3,3,3,4	19	1	81·8
11 d	16 8	*481*	322	9 50	*159*	14 4	47·9	15·9	20 37	32·0	16 20	*1111*	911	6 34	*200*	2,3,3,2,3,3,4,3	23	1	82·1
12 d	16 40	432	*313*	3 55	119	13 16	39·5	12·4	21 4	27·1	19 30	1032	887	2 10	145	4,3,2,1,1,2,4,3	20	1	83·0
13	17 58	443	357	15 20	86	12 48	40·6	20·4	22 48	20·2	17 16	1003	949	24 0	54	2,2,2,1,2,3,3,3	18	1	82·8
14	16 29	432	344	11 9	88	14 26	44·6	26·3	21 48	18·3	16 11	1042	928	24 0	114	3,1,1,1,3,3,2;3	17	1	83·5
15 q	22 10	404	343	11 10	61	14 15	37·9	25·2	7 30	12·7	18 18	984	929	0 0	55	3,1,0,1,1,1,0,2	9	0	83·0
16	17 10	423	353	10 10	70	13 26	39·6	23·1	3 44	16·5	21 7	988	940	3 12	48	2,2,1,1,2,2,2,2	14	0	83·0
17	18 28	431	349	10 29	82	14 29	41·8	22·3	1 45	19·5	18 22	999	932	0 43	67	2,1,1,2,2,2,2,3	15	0	83·0
18	16 11	430	352	14 9	78	13 33	43·6	20·5	22 54	23·1	16 47	1012	902	23 3	110	2,1,2,0,3,3,2,3	16	1	83·1
19	18 6	444	345	11 14	99	23 37	42·3	21·9	21 52	20·4	16 27	1009	904	24 0	105	2,1,1,1,2,3,2,4	16	1	83·3
20	19 37	414	336	11 52	78	13 45	37·7	26·3	3 37	11·4	16 28	1006	904	0 1	102	3,2,2,2,1,2,1,1	14	0	83·3
21	14 32	450	345	10 40	105	14 28	44·8	24·4	7 56	20·4	15 57	1006	953	13 28	53	1,1,1,2,3,4,2,0	14	1	84·0
22 q	17 45	418	332	10 36	86	12 34	41·0	26·3	6 42	14·7	18 51	989	957	12 34	32	1,1,1,1,2,2,1,1	10	0	84·9
23	18 30	420	321	10 30	99	11 44	41·0	23·2	5 55	17·8	17 25	986	936	7 49	50	2,2,3,2,1,2,1,0	13	0	85·0
24	19 42	417	338	8 17	79	13 17	41·9	21·2	6 24	20·7	16 57	1000	919	5 2	81	2,3,2,2,2,2,2,0	15	0	84·5
25 d	17 51	440	326	11 20	114	3 37	*53·7*	20·1	7 18	33·6	18 53	1005	881	4 0	124	2,4,3,2,3,3,3,2	22	1	84·2
26	18 43	439	345	10 40	94	13 57	39·7	22·2	6 40	17·5	19 57	981	962	12 31	*19*	2,0,0,1,1,2,2,1	9	0	84·1
27	17 0	452	348	9 5	104	13 54	40·6	23·4	6 19	17·2	19 50	985	953	11 49	32	1,0,1,2,3,3,2,2	14	1	83·5
28	16 34	436	330	10 50	106	14 12	40·8	26·5	5 46	14·3	17 32	997	959	11 32	38	0,0,0,2,2,3,2,1	10	0	83·3
29	18 33	428	344	10 28	94	0 56	44·0	18·0	2 17	26·0	18 20	1007	906	1 26	101	4,2,1,1,1,2,3,2	16	0	83·2
30 d	17 34	468	338	10 16	130	14 19	41·9	16·0	21 52	25·9	18 7	1011	896	23 56	115	2,2,2,2,3,4,3,4	22	1	83·1
31	17 40	426	335	8 31	91	14 29	39·1	25·3	1 45	13·8	16 50	1002	888	0 31	114	4,2,2,3,2,3,1,0	17	1	83·9
Mean	− −	435	342	− −	92	− −	41·4	21·3	− −	20·1	− −	1005	921	− −	84	−	15·3	0·52	82·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

24 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	388	388	387	386	388	385	374	367	357	347	347	353	357	370	375	383	397	405	422	420	410	400	393	391	383
2 q	389	388	389	390	390	386	379	372	362	347	339	347	357	371	381	389	397	407	409	407	407	401	397	389	383
3 q	380	380	377	370	376	386	381	375	369	367	362	362	372	371	374	376	387	393	402	400	397	395	391	390	381
4	390	389	389	391	389	386	382	379	375	365	353	349	358	383	384	397	398	398	404	410	409	401	393	392	386
5	390	393	392	395	396	393	392	386	375	358	354	361	366	377	383	393	410	415	424	419	419	413	409	408	393
6 d	401	401	401	406	409	410	405	381	366	357	334	319	367	397	384	424	414	450	443	414	400	389	386	369	393
7 d	364	377	374	350	362	374	365	346	353	352	350	358	367	376	387	404	400	432	445	433	404	395	385	380	381
8 d	371	336	350	358	363	348	351	360	362	358	353	349	366	376	406	422	420	404	419	414	414	410	389	389	379
9	374	380	372	376	380	372	352	337	339	337	342	351	357	368	372	387	414	417	426	433	408	400	389	379	378
10 d	376	357	355	342	353	354	367	380	370	359	350	338	353	360	372	380	398	430	436	435	417	401	383	387	*377*
11	383	351	373	389	392	390	379	364	344	337	340	344	353	365	386	393	410	418	430	437	423	401	396	388	383
12	383	383	387	386	387	385	381	372	369	364	356	353	356	367	378	381	396	401	414	414	414	400	396	389	384
13	383	383	386	389	388	380	377	376	371	363	357	369	374	383	380	380	387	402	410	408	407	406	398	394	385
14	388	387	388	389	393	396	397	400	397	381	370	361	362	365	373	382	391	404	421	430	426	404	396	390	391
15	389	384	380	387	387	387	386	386	385	375	365	363	350	355	372	380	388	396	404	413	410	402	394	390	385
16	387	384	385	388	390	390	385	387	385	379	369	360	366	371	374	397	410	415	419	411	409	403	394	394	390
17	382	379	377	375	380	387	387	387	388	375	366	362	367	380	389	420	379	401	408	409	409	406	404	401	388
18	397	394	396	396	392	390	384	379	370	366	363	370	379	380	390	400	401	407	406	407	406	400	398	396	390
19	396	388	387	389	387	385	376	367	359	357	365	375	381	384	388	397	402	404	417	423	423	405	387	384	389
20	388	391	384	383	387	385	376	374	367	360	351	369	368	375	389	389	397	398	402	410	404	402	397	394	385
21	393	387	387	385	379	387	384	375	365	358	357	361	373	384	384	397	401	402	410	414	410	402	402	397	387
22 q	389	385	385	386	384	380	376	374	372	362	358	360	371	388	393	384	383	394	398	405	405	398	397	397	384
23	398	399	398	397	395	389	387	387	375	358	367	364	378	383	390	394	403	405	402	406	401	397	397	395	390
24	394	394	389	387	387	384	379	376	375	371	369	367	370	384	380	383	390	400	404	409	404	404	400	496	487
25	387	373	359	364	384	386	385	378	370	358	357	359	364	369	376	380	387	390	394	398	399	398	396	392	379
26	389	393	396	395	390	387	380	376	372	365	366	365	372	384	385	394	402	405	406	410	412	404	404	402	390
27	404	400	401	383	397	392	384	391	375	339	367	374	383	380	387	399	406	412	407	410	413	406	397	393	392
28	393	389	384	388	392	393	389	383	375	371	367	370	377	384	386	403	394	400	409	406	397	394	394	401	389
29 q	393	387	388	384	388	387	383	380	376	370	365	359	358	369	380	382	394	397	400	401	404	400	397	393	385
30 d	391	389	388	393	398	401	394	401	397	387	373	369	371	378	405	434	449	402	423	427	415	412	410	404	*400*
Mean	388	384	383	383	386	385	381	377	371	361	*358*	359	366	376	383	394	400	407	414	*414*	409	402	396	392	386

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −5γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

25 LERWICK (D) — 11° + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	31·0	30·1	29·3	29·0	27·0	27·2	27·2	27·0	27·4	30·2	32·4	34·0	35·6	36·0	35·9	34·9	34·4	34·9	33·1	33·2	33·3	33·1	32·3	31·3	31·7
2 q	30·4	29·9	29·2	28·3	27·4	26·4	26·1	27·4	28·1	30·1	32·0	34·1	35·0	35·2	35·7	35·5	35·0	35·0	35·0	35·0	34·4	33·7	32·1	32·1	31·8
3 q	32·6	30·3	30·0	31·3	31·3	30·5	28·2	26·6	25·6	27·7	30·2	33·8	36·1	35·5	34·9	34·1	33·4	32·8	32·2	32·2	32·1	32·3	32·0	31·1	31·5
4	30·2	29·9	29·2	29·0	28·0	26·7	26·2	27·1	27·6	29·8	32·0	35·8	38·8	40·2	38·9	37·2	35·7	33·8	32·8	32·8	32·2	31·8	31·4	31·5	32·0
5	32·2	31·7	30·5	30·5	28·2	26·8	26·1	25·2	25·4	27·5	30·2	32·3	34·5	36·6	36·7	35·0	33·8	33·8	33·9	33·3	34·1	33·0	32·2	32·7	31·5
6 d	29·9	29·4	31·4	29·8	28·0	23·2	19·4	17·3	23·9	27·3	28·0	38·2	40·2	43·9	42·6	41·7	39·0	39·6	35·6	35·8	33·0	30·2	30·2	35·1	32·2
7 d	34·6	29·1	26·1	25·6	28·9	25·8	26·0	24·5	25·0	28·1	31·1	35·0	35·5	35·1	35·7	35·8	33·3	35·1	35·2	34·3	28·5	25·6	27·1	28·9	30·4
8 d	29·8	28·9	32·9	26·1	22·6	24·0	24·2	25·3	27·1	30·1	32·2	35·5	37·8	39·1	35·0	33·9	35·0	35·0	36·5	33·5	29·1	29·9	30·0	29·2	30·9
9	28·5	29·4	28·7	29·9	26·6	26·6	28·5	27·8	29·1	30·3	33·8	34·9	35·8	36·9	36·3	35·2	34·2	34·1	29·2	33·2	32·3	31·5	34·1	30·2	31·5
10 d	24·2	26·7	31·9	33·9	32·7	28·0	26·6	25·2	23·6	25·9	29·4	32·3	34·4	37·4	38·8	36·0	34·3	31·7	31·9	31·9	32·9	32·9	36·1	31·9	31·3
11	32·9	36·8	32·0	28·3	24·1	24·0	25·0	25·4	25·9	27·9	29·9	32·9	37·0	39·0	39·2	37·6	36·9	35·3	34·7	27·5	29·4	32·5	31·9	31·3	31·6
12	30·9	30·2	30·1	29·2	27·9	26·7	27·1	25·5	25·2	25·3	26·8	30·0	32·3	35·0	37·0	36·2	35·2	34·2	32·6	31·4	30·0	29·9	28·6	28·4	30·2
13	28·1	27·7	27·6	27·5	26·9	27·6	26·3	25·2	25·1	26·2	28·9	31·9	34·4	35·2	37·1	37·9	36·2	35·2	34·5	32·9	32·0	32·1	31·1	31·5	30·8
14	31·3	31·9	32·9	30·0	27·1	25·1	23·6	23·1	24·2	27·0	29·2	32·2	34·9	35·7	35·6	35·1	34·2	34·0	34·2	31·4	32·0	31·1	30·6	30·9	30·9
15	29·9	28·3	26·7	27·0	26·1	24·9	25·2	26·3	28·0	30·5	31·6	32·5	33·6	35·8	37·2	36·8	35·2	33·9	32·8	31·9	31·5	30·6	30·3	30·1	30·7
16	29·6	30·0	29·8	27·4	26·2	25·1	24·4	25·2	26·2	29·4	32·0	34·9	36·8	37·3	37·6	37·8	37·5	37·3	35·9	33·2	33·7	32·3	29·8	30·1	31·6
17	30·7	31·7	27·3	25·3	26·0	24·2	24·1	22·4	23·0	26·0	29·0	32·0	35·0	37·1	38·6	41·6	38·3	36·3	35·4	34·2	33·0	32·2	31·9	30·9	31·1
18	31·4	30·2	29·4	27·7	27·5	26·9	27·1	26·0	26·4	26·1	28·0	31·8	35·5	37·6	37·0	37·2	36·3	35·2	33·3	32·6	32·6	31·8	32·1	31·3	31·3
19	31·0	31·3	31·0	29·0	27·3	26·4	25·5	24·2	25·2	27·7	32·0	34·7	35·5	35·8	36·1	35·7	35·0	35·0	35·9	35·1	34·2	32·8	28·0	31·9	31·5
20	30·8	28·8	26·9	30·3	27·9	25·8	25·5	26·2	26·3	27·1	32·6	35·0	36·0	35·3	34·7	34·7	34·1	33·9	33·4	32·9	32·2	31·9	32·8	33·0	31·2
21	32·0	30·1	30·7	29·9	30·2	26·9	26·0	26·3	27·9	30·6	32·1	34·9	37·5	37·1	35·8	34·4	33·4	32·9	32·7	32·8	32·6	31·7	32·2	32·8	31·8
22 q	32·1	31·3	28·8	27·8	26·8	25·9	25·5	25·8	26·8	29·0	31·1	33·7	36·1	38·0	38·1	36·0	33·8	32·1	32·0	31·3	32·2	32·8	32·3	31·9	31·3
23	30·9	30·1	29·3	27·9	26·9	25·2	23·8	23·2	23·5	29·7	32·9	36·4	36·9	35·9	35·0	35·6	35·6	33·7	32·8	32·3	32·1	31·8	32·2	32·8	31·1
24	32·2	31·3	32·1	31·5	29·4	26·5	25·4	25·1	26·2	28·4	31·6	33·9	35·6	35·8	34·9	33·7	32·5	32·1	31·9	31·6	31·3	32·0	32·0	32·6	31·2
25	25·9	22·1	25·7	29·6	23·5	22·0	22·0	24·3	25·5	29·3	31·1	33·5	36·5	38·0	37·6	36·7	35·6	34·4	33·3	32·7	31·9	31·2	30·9	31·0	30·2
26	30·6	29·5	29·2	29·0	27·2	26·1	25·3	25·1	25·7	28·1	30·7	33·6	34·5	35·9	36·7	37·1	36·8	34·9	33·6	33·2	32·9	31·9	32·0	30·6	31·3
27	31·3	31·7	33·6	35·2	26·4	29·9	30·9	25·9	25·1	30·9	32·8	35·7	39·0	40·7	40·1	37·8	33·9	32·6	31·1	31·0	30·0	31·3	32·0	31·5	*32·5*
28	30·1	29·9	30·1	29·0	26·1	25·1	24·7	25·9	26·8	28·2	29·9	34·0	38·2	39·0	36·8	36·3	34·9	33·7	33·0	32·5	31·8	31·4	31·8	31·0	31·3
29 q	29·1	28·2	28·8	29·5	26·9	24·5	24·0	23·6	23·3	25·8	27·9	31·4	33·4	34·8	34·9	34·1	33·2	32·9	33·4	33·4	33·1	32·6	32·2	31·3	*30·1*
30 d	30·2	30·1	29·9	29·9	29·2	27·9	25·8	25·4	26·0	27·8	28·8	32·0	36·6	37·8	38·0	37·6	40·1	34·8	37·2	37·4	35·7	34·8	33·3	32·8	32·5
Mean	30·5	29·9	29·7	29·1	27·3	26·1	25·5	*25·1*	25·8	28·3	30·7	33·8	36·0	*37·1*	37·0	36·3	35·2	34·3	33·6	33·0	32·2	31·8	31·5	31·4	31·3

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

26 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	971	974	975	976	975	980	982	979	973	968	965	964	964	965	966	968	974	979	982	984	984	980	976	975	974
2 q	974	974	974	975	975	977	977	975	976	978	971	960	952	956	965	969	973	978	982	982	980	979	974	975	973
3 q	973	969	972	966	955	951	958	961	965	966	968	971	964	961	966	970	970	971	973	978	979	977	975	973	968
4	973	972	973	973	972	974	976	977	977	977	977	972	964	960	966	969	971	974	975	975	977	980	979	975	973
5	971	970	971	969	968	971	971	971	969	967	966	959	958	957	960	961	962	964	967	977	979	976	975	972	968
6 d	974	973	967	957	956	960	960	960	960	957	970	958	958	982	1015	1021	1030	1015	1015	994	982	975	974	957	*978*
7 d	879	900	926	941	929	941	948	960	962	966	967	960	968	978	976	974	984	977	984	988	968	956	964	966	957
8 d	950	903	877	860	867	896	919	943	956	963	961	964	968	970	983	1001	1001	990	974	979	980	971	959	924	*948*
9	931	943	956	963	969	970	972	969	964	961	961	962	972	979	983	986	985	985	992	982	980	967	933	929	966
10 d	917	908	911	893	877	906	934	947	957	962	967	971	966	973	977	985	990	992	995	995	991	980	946	939	953
11	956	921	916	941	956	966	974	978	978	971	969	972	973	975	975	979	981	984	989	997	985	977	973	973	969
12	972	973	975	979	979	979	979	979	978	973	972	966	969	971	971	974	975	978	978	981	980	979	973	965	975
13	963	964	967	969	973	976	976	974	972	970	969	960	962	971	978	983	982	983	986	989	986	981	977	974	974
14	973	973	969	967	971	974	974	974	975	972	970	967	967	969	970	972	974	974	973	974	981	984	978	973	973
15	972	970	970	971	971	975	975	974	975	975	969	957	963	960	958	964	969	974	976	975	978	978	974	971	971
16	971	970	965	969	971	971	971	968	964	961	961	959	958	958	963	964	974	982	990	992	985	982	982	966	971
17	960	945	949	960	959	952	951	953	954	959	961	959	958	959	967	972	1000	987	977	975	976	976	975	974	965
18	974	975	974	975	975	971	974	979	978	976	977	974	976	972	966	969	976	979	983	983	981	981	979	976	976
19	976	976	976	975	975	974	971	972	972	966	965	965	969	969	964	962	971	976	971	974	977	985	979	967	972
20	932	941	960	960	955	961	966	966	969	970	973	969	969	966	968	971	974	976	976	978	982	981	979	979	968
21	972	973	976	975	971	968	969	969	967	965	961	956	956	963	974	981	986	983	977	977	977	978	977	974	972
22 q	971	971	972	977	975	971	971	970	969	963	961	958	958	958	966	975	974	972	975	975	974	973	972	972	970
23	972	973	974	975	973	971	967	963	962	959	953	960	959	960	959	965	973	984	981	974	971	972	972	972	969
24	972	975	976	972	967	966	963	959	958	958	958	956	960	965	971	971	973	974	974	974	972	970	968	966	967
25	951	951	948	929	939	955	960	961	961	953	952	956	962	962	961	968	972	974	971	967	967	967	968	968	959
26	968	968	972	973	972	969	970	968	963	962	961	957	957	962	964	963	967	971	970	967	967	968	967	968	966
27	968	972	966	946	921	934	939	942	954	959	954	960	967	976	980	974	977	982	982	981	980	978	973	971	964
28	971	972	969	964	967	967	970	969	960	958	957	958	959	958	967	979	996	989	982	975	973	971	968	961	969
29 q	961	967	967	965	957	963	969	970	965	964	959	958	962	960	961	967	968	969	970	969	970	969	968	968	965
30 d	968	969	969	969	966	963	964	961	961	955	953	955	959	956	956	969	993	1036	1019	1007	996	983	972	967	974
Mean	961	959	960	959	*958*	962	965	966	966	965	964	962	963	966	970	974	980	*982*	981	981	979	976	971	966	968

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −5γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

27 LERWICK — JUNE 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ			°A.
1 q	18 32	432	342	10 5	90	13 49 36·3	26·0 4 26	*10·3*	20 16	985	962	11 7	23	0,1,1,1,1,1,2,0	7	0	84·2
2 q	18 31	420	336	10 17	84	14 40 36·1	25·1 6 0	11·0	18 56	987	951	12 30	36	0,0,0,2,1,1,2,1	7	0	85·0
3 q	18 52	406	358	11 18	*48*	12 47 36·6	25·1 8 42	11·5	20 50	979	949	5 37	30	1,2,2,1,2,0,1,0	9	0	84·5
4	19 40	413	346	11 13	67	13 10 41·0	25·8 6 19	15·2	20 45	982	956	13 19	26	0,0,1,1,2,1,1,1	7	0	85·0
5	19 7	428	350	10 22	78	13 47 37·0	24·8 7 34	12·2	19 49	981	956	13 39	25	0,1,1,1,1,2,1,1	8	0	85·0
6 d	17 50	467	*299*	11 14	*168*	13 15 *47·9*	*13·7* 7 59	*34·2*	15 59	1038	902	24 0	136	1,2,3,3,4,4,3,3	23	1	85·0
7 d	18 26	459	336	3 36	123	19 44 40·3	19·9 3 2	20·4	19 25	1002	872	0 40	130	3,3,2,2,2,3,3,2	20	1	84·2
8 d	15 55	444	320	1 35	124	13 4 40·7	21·2 4 59	19·5	15 16	1011	*852*	3 49	*159*	4,3,3,2,3,3,3,3	24	1	84·4
9	19 2	454	330	7 5	124	14 0 37·7	25·0 18 43	12·7	18 25	1000	916	22 48	84	2,1,2,2,2,3,3,3	18	1	85·0
10 d	19 2	446	327	3 58	119	14 38 39·5	22·1 0 42	17·4	19 48	1001	868	4 23	133	3,3,2,2,2,3,2,3	20	1	85·1
11	19 30	446	332	9 21	114	14 48 40·1	22·9 4 42	17·2	19 23	1007	902	1 51	105	3,3,2,1,2,2,3,1	17	1	85·2
12	20 47	424	345	10 55	79	14 38 37·3	24·8 9 53	12·5	20 55	984	963	23 56	21	0,1,2,2,2,1,2,2	12	1	85·3
13	21 10	412	353	10 54	59	15 14 38·9	24·3 8 21	14·6	19 25	991	957	11 56	34	0,1,2,2,2,3,0,1	11	1	85·1
14	20 9	436	359	11 28	77	14 10 36·0	22·4 7 52	13·6	21 7	986	964	11 48	22	1,2,2,2,1,1,2,1	12	0	85·0
15	20 9	416	339	2 41	77	14 24 37·8	24·0 5 56	13·8	20 57	980	955	11 35	25	1,1,1,2,2,1,1,1	10	0	84·2
16	18 12	426	358	11 38	68	15 16 38·7	23·8 6 32	14·9	19 7	994	957	13 25	37	1,0,1,2,2,2,2,2	12	0	83·9
17	15 41	447	358	11 9	89	15 55 42·2	21·4 7 28	20·8	16 23	1007	938	1 43	69	2,2,2,1,2,4,1,0	14	1	83·4
18	19 36	417	362	10 37	55	13 15 38·2	24·0 5 6	14·2	19 49	987	965	14 16	22	0,1,1,1,1,1,2,1	8	0	83·0
19	19 52	431	353	9 28	78	14 32 37·1	22·8 7 19	14·3	21 34	986	946	24 0	40	1,1,1,2,2,1,2,3	13	1	83·1
20	19 33	414	347	10 31	67	12 30 36·8	23·7 5 59	13·1	20 56	984	921	0 53	63	3,2,1,2,1,2,1,2	14	1	84·5
21	19 11	415	355	10 46	60	12 55 37·9	25·1 7 5	12·8	16 40	990	955	11 52	35	2,2,0,0,2,2,0,1	9	0	86·1
22 q	19 59	413	356	10 54	57	14 14 38·8	25·1 6 18	13·7	15 56	978	957	12 11	21	1,0,1,0,1,2,1,0	6	0	86·9
23	17 14	410	354	9 47	56	11 55 37·8	20·8 8 3	17·0	17 35	986	950	10 30	36	0,1,1,2,2,2,1,0	9	0	87·0
24	19 33	417	364	11 54	53	23 51 36·8	23·0 7 5	13·8	2 36	977	955	11 0	22	0,1,1,1,2,0,1,2	8	0	87·5
25	19 28	410	340	2 52	70	13 20 38·3	21·2 1 52	17·1	17 10	975	919	3 23	56	3,3,1,1,1,1,2,0	12	1	87·4
26	20 16	420	364	9 47	56	16 27 37·7	24·9 7 54	12·8	3 56	974	955	12 0	19	1,0,1,0,2,0,2,1	7	0	87·6
27	17 29	427	327	9 25	100	13 7 41·8	23·2 7 48	18·6	17 49	988	913	4 12	75	2,3,3,3,2,2,2,1	18	1	88·1
28	16 12	414	364	11 5	50	13 24 41·4	23·9 6 43	16·5	16 38	1000	954	13 29	46	1,1,1,1,2,2,1,2	11	1	87·7
29 q	20 9	406	355	12 30	51	14 3 35·0	23·0 8 10	12·0	20 47	972	956	4 40	*16*	1,2,1,1,1,0,1,0	7	0	87·1
30 d	16 22	*490*	357	12 15	133	16 30 42·1	23·7 8 17	18·4	17 18	*1040*	949	14 35	91	0,2,2,2,3,4,3,2	18	1	87·0
Mean	- -	429	346	- -	82	- - 38·8	23·2 - -	15·5	- -	992	937	- -	55	-	12·4	0·50	85·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

28 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	379	377	324	327	345	340	350	329	332	319	319	325	351	423	388	380	438	459	453	422	398	372	340	339	368
2	242	301	364	375	375	373	366	358	353	352	353	358	365	371	382	399	405	397	394	399	392	388	385	377	*368*
3	363	375	380	385	372	364	371	375	367	358	351	345	354	370	374	381	382	383	396	396	394	394	389	388	375
4 d	388	388	388	396	392	390	382	373	360	360	359	344	355	383	376	433	410	394	401	397	390	392	404	366	384
5	350	372	375	369	362	359	380	376	356	324	360	369	357	356	364	383	391	402	423	405	399	392	394	365	374
6 d	370	388	388	382	376	361	300	264	301	319	379	391	366	363	375	433	434	425	410	396	390	385	376	370	373
7	375	375	372	359	371	374	373	368	356	348	343	341	348	359	375	380	400	409	406	419	418	406	371	378	376
8	358	371	382	357	317	378	364	350	335	327	331	338	347	382	408	388	422	422	417	418	405	401	383	379	374
9	364	383	387	385	379	376	364	359	355	350	350	358	363	366	387	392	397	401	408	400	401	399	390	388	379
10 q	380	378	381	385	382	377	372	366	358	348	343	342	356	373	390	409	407	412	407	406	406	389	387	385	381
11	385	381	381	385	386	384	376	369	363	356	344	338	352	373	391	396	396	394	399	402	399	400	401	398	381
12	397	393	394	390	388	379	377	382	372	347	338	337	347	366	386	397	400	408	409	405	401	396	394	394	383
13	392	392	390	384	387	387	381	375	365	349	355	356	360	363	366	373	384	391	397	396	398	398	399	391	380
14	390	387	390	391	388	380	384	381	372	356	343	331	337	360	386	402	402	395	397	401	398	398	394	393	381
15 q	390	389	389	391	393	391	384	378	370	361	357	360	360	362	370	383	394	390	397	402	404	401	396	396	384
16	391	380	383	391	391	391	387	379	369	363	362	361	362	366	403	391	402	408	412	436	436	412	392	380	389
17 d	388	395	391	380	383	384	379	372	372	371	367	362	371	387	394	409	415	472	436	458	444	384	384	384	*395*
18	378	387	386	394	397	384	380	364	363	357	357	351	354	366	379	396	410	409	408	406	403	389	384	384	383
19	387	384	375	370	388	390	382	378	369	357	354	356	363	367	372	383	391	399	400	408	416	414	395	386	383
20 q	385	385	385	385	384	383	378	370	361	350	340	337	344	360	375	385	394	397	395	400	396	396	396	395	378
21	397	397	392	392	391	388	381	371	357	345	335	338	348	361	375	388	396	403	405	403	401	400	396	396	381
22 q	396	393	392	391	392	388	382	372	365	352	350	353	362	365	374	382	388	399	404	417	412	393	389	387	383
23	384	383	383	383	383	380	376	369	361	350	345	351	363	372	400	410	426	424	438	426	426	410	392	385	388
24	388	389	387	392	388	383	377	369	366	356	346	344	348	358	366	377	392	408	406	404	393	386	382	380	379
25	379	377	372	377	385	383	374	359	348	333	334	336	349	358	371	391	392	388	397	403	401	396	392	392	374
26	392	393	393	391	390	385	384	385	377	360	354	354	368	372	382	384	395	396	410	408	404	397	392	391	386
27 q	387	384	388	388	387	384	382	377	372	363	357	354	357	363	371	369	381	391	401	402	401	399	397	395	381
28	393	394	401	400	401	404	394	379	366	357	360	373	367	366	388	382	384	393	395	397	401	403	406	403	388
29	393	365	387	391	391	387	379	367	356	350	353	363	375	375	387	403	399	410	406	407	411	411	390	374	385
30 d	369	355	329	334	300	361	375	373	364	362	358	360	361	372	384	388	395	414	402	397	398	402	405	381	372
31	352	324	346	376	376	372	369	368	363	356	354	354	363	373	375	374	380	385	392	394	393	390	388	389	371
Mean	377	379	380	381	379	379	374	366	359	350	*350*	351	357	369	381	392	400	406	407	*407*	404	397	390	384	380

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -4γ.

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

29 LERWICK (D) — 11° + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	21·2	26·4	30·0	21·3	37·1	36·2	31·0	25·1	32·0	33·5	33·7	37·1	38·6	41·8	44·9	38·8	38·9	37·8	28·8	36·2	34·9	33·5	27·9	25·9	*33·0*
2	23·4	15·4	19·9	21·6	23·8	23·7	22·4	23·8	24·3	25·3	27·8	32·1	36·9	37·1	36·9	36·9	36·1	33·7	32·4	32·9	33·1	30·4	29·5	32·0	28·8
3	33·9	23·2	24·2	25·8	23·3	28·9	29·2	26·0	27·0	28·9	29·8	32·3	36·0	37·9	36·0	33·7	32·8	32·7	32·1	31·9	31·9	32·2	31·1	30·2	30·5
4 d	29·1	29·0	29·3	28·9	25·5	23·6	22·9	26·1	26·0	28·2	29·0	32·2	35·4	38·0	39·8	37·8	37·2	34·6	35·1	34·8	31·7	32·2	25·2	27·9	30·8
5	35·2	28·8	25·9	26·7	28·2	31·1	27·9	27·7	27·7	29·9	32·1	36·1	38·3	37·8	34·9	34·0	33·2	33·4	32·0	30·2	32·0	31·9	31·9	31·3	31·6
6 d	30·8	26·7	25·1	25·0	21·2	24·4	39·7	32·9	31·0	29·9	30·2	30·0	31·6	33·7	32·0	30·0	31·9	29·7	32·8	33·3	32·3	28·4	29·0	29·2	30·0
7	29·3	29·0	28·5	27·8	26·9	24·3	25·0	25·2	25·8	27·0	28·3	32·9	35·7	35·4	35·7	34·9	33·8	33·6	34·0	35·0	33·3	33·9	27·0	30·1	30·5
8	32·0	31·6	27·5	29·5	33·5	23·2	21·3	21·7	24·0	26·0	30·0	34·1	37·6	37·9	37·0	34·1	34·9	34·9	34·4	34·7	31·3	28·0	29·5	30·9	30·8
9	33·6	29·0	26·8	25·3	25·0	24·2	24·8	25·0	26·1	28·1	27·9	30·8	33·7	35·6	34·8	35·6	34·4	30·3	31·9	32·5	32·7	32·5	31·9	30·1	30·1
10 q	29·9	28·2	26·7	25·6	25·3	24·1	23·9	25·0	25·8	28·3	31·1	35·4	39·1	41·5	40·0	37·9	35·4	33·5	32·4	32·0	27·7	28·8	29·9	29·1	30·7
11	30·4	27·1	27·0	26·3	23·7	21·3	20·2	21·9	24·4	27·1	29·9	32·7	35·4	37·3	37·5	36·1	34·9	33·7	32·5	31·4	31·6	31·8	31·6	30·7	29·9
12	29·8	28·9	30·0	28·0	25·1	25·0	25·1	25·5	26·1	29·1	31·2	34·9	38·0	40·8	39·7	38·0	35·9	33·9	32·9	31·9	31·8	31·6	30·3	30·4	31·4
13	30·6	29·9	28·3	26·0	24·8	24·3	23·0	22·9	23·2	26·0	29·1	34·9	37·8	38·8	37·8	36·0	34·1	31·8	31·1	31·1	31·6	31·1	30·1	31·2	30·2
14	28·9	27·9	27·2	27·9	26·9	26·9	25·9	24·1	24·1	26·6	29·3	32·9	35·8	38·0	37·4	36·0	35·0	33·4	32·9	32·5	31·9	31·9	31·2	31·2	30·7
15 q	30·5	29·6	29·2	28·1	25·8	23·7	23·2	24·7	25·5	28·1	30·6	33·1	35·9	37·1	36·1	35·0	34·8	33·5	33·3	32·0	32·0	32·0	32·1	32·5	30·8
16	32·9	32·2	30·8	25·9	24·0	22·1	22·3	23·0	23·9	25·5	28·8	32·5	35·2	37·7	38·7	38·1	35·7	34·2	33·9	34·7	35·1	26·7	24·6	30·4	30·4
17 d	28·8	29·6	27·0	25·0	23·6	21·9	22·1	23·9	25·5	28·2	30·5	34·3	37·0	38·6	39·2	35·1	36·2	38·4	34·9	35·8	24·8	26·4	30·9	30·1	30·3
18	30·7	30·4	33·5	31·2	28·9	28·0	26·2	28·0	27·9	27·9	27·9	31·3	34·1	35·0	34·9	34·3	32·9	32·0	31·1	31·0	28·0	30·9	31·9	31·7	30·8
19	30·9	30·7	33·9	31·3	27·9	25·0	24·4	23·6	23·6	25·9	29·1	34·1	36·1	38·0	37·6	37·6	36·6	34·7	32·0	31·9	31·1	30·9	29·8	29·0	31·1
20 q	29·2	28·6	28·1	27·1	25·7	24·8	24·0	24·0	24·1	25·1	28·5	32·2	34·9	36·0	35·9	34·9	32·3	31·2	31·2	32·1	31·9	31·3	30·9	30·9	29·8
21	31·5	31·1	28·9	27·2	26·1	25·9	24·9	25·9	26·1	27·1	30·0	33·9	36·0	36·8	35·8	34·9	33·1	32·1	32·1	32·9	32·8	31·8	31·5	31·5	30·8
22 q	31·2	29·7	29·0	28·2	26·2	23·7	23·3	24·8	25·0	28·1	30·9	34·1	37·0	37·6	37·1	36·7	35·4	34·1	33·3	31·8	29·9	30·7	30·6	29·9	30·8
23	28·9	32·0	27·1	25·0	23·3	23·6	24·2	25·1	25·1	25·9	28·9	33·2	36·1	36·6	36·0	36·1	37·8	38·4	39·9	39·1	37·8	28·9	11·9	18·7	30·0
24	20·9	26·1	26·1	27·4	26·9	26·2	26·9	27·9	28·8	31·0	34·5	38·0	37·9	38·0	36·1	35·0	33·3	31·8	30·1	28·4	30·9	31·3	30·6	30·0	30·6
25	29·9	28·9	30·0	26·7	25·0	23·0	21·5	22·1	22·8	26·4	30·8	33·9	34·1	33·9	33·3	32·2	31·2	30·9	31·2	31·6	31·7	32·9	31·1	29·4	29·4
26	28·9	29·2	28·9	28·3	27·4	25·9	25·8	24·4	25·1	27·8	31·9	34·5	37·0	38·4	37·1	34·3	31·8	31·2	31·3	30·4	30·7	31·8	31·9	32·2	30·7
27 q	30·0	29·4	28·9	28·3	27·3	26·3	25·9	26·2	26·6	27·9	30·6	32·9	35·0	35·1	34·9	34·0	33·9	31·8	31·2	31·3	31·5	31·7	31·7	31·2	30·6
28	30·7	29·9	29·0	25·8	25·1	23·1	21·2	22·1	23·0	31·4	33·8	36·3	41·8	39·9	39·6	36·6	34·7	35·2	33·9	32·7	32·1	31·6	30·8	29·1	31·2
29	27·9	30·9	30·2	25·9	24·9	24·2	25·0	25·2	26·6	29·7	32·9	34·9	36·4	37·8	38·0	38·1	35·6	32·4	32·2	33·2	33·1	31·3	18·5	25·0	30·4
30 d	24·0	18·0	10·2	14·8	28·0	26·2	19·0	19·8	23·3	29·0	32·5	34·6	37·0	38·3	36·7	34·9	33·8	34·1	33·5	33·1	32·2	30·9	28·5	23·7	*28·2*
31	22·3	20·5	27·9	26·3	24·2	25·0	25·5	25·8	26·3	28·0	30·2	32·9	34·1	35·0	34·2	33·0	32·1	31·9	31·0	31·1	31·1	31·0	29·7	30·3	29·1
Mean	29·3	28·0	27·6	26·4	26·1	25·2	*24·8*	24·8	25·7	28·0	30·4	33·7	36·3	*37·5*	37·0	35·5	34·5	33·4	32·6	32·7	31·8	31·0	29·1	29·5	30·5

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

30 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	925	937	831	734	748	780	839	889	919	942	969	973	981	981	1016	1000	993	1053	1070	1017	998	983	937	933	*935*
2	865	843	906	946	963	976	980	976	973	973	971	963	966	969	973	976	993	995	987	978	978	978	976	968	961
3	911	912	945	958	959	957	943	952	960	963	970	968	963	963	966	971	976	976	976	978	979	973	973	970	961
4 d	969	967	966	963	963	962	964	966	966	964	964	974	986	987	990	997	1002	994	981	983	986	978	953	932	973
5	880	899	913	937	939	918	927	953	963	978	974	974	967	967	973	972	975	981	980	983	981	979	974	947	956
6 d	888	940	963	963	957	919	843	861	892	941	985	975	975	989	1000	1013	1024	1030	1004	988	983	990	983	975	962
7	974	975	970	969	970	975	976	977	978	978	980	980	984	993	986	980	979	987	991	981	982	924	937	949	974
8	928	919	948	940	882	908	940	955	966	974	973	969	972	975	991	999	991	992	988	981	981	968	959	942	960
9	926	949	963	974	976	977	978	970	964	959	960	960	967	971	970	974	981	990	982	979	976	970	962	965	968
10 q	968	969	970	974	974	974	974	971	969	968	966	963	960	954	944	951	966	978	982	979	979	978	971	966	969
11	958	960	969	973	976	979	979	972	967	969	969	966	961	964	964	965	973	981	979	979	975	971	967	967	970
12	966	968	965	966	971	972	961	958	960	961	957	956	962	957	960	971	976	980	982	982	977	972	971	969	967
13	962	959	967	972	974	972	968	966	966	962	961	957	958	958	964	971	975	977	976	974	971	972	966	964	967
14	958	962	966	969	972	971	969	972	973	973	972	972	966	958	952	962	974	980	977	977	977	974	972	969	969
15 q	970	971	971	973	974	977	976	973	970	963	964	963	968	970	966	966	967	973	973	974	974	973	972	968	970
16	966	962	960	960	969	969	971	971	967	966	962	956	955	956	956	971	972	976	974	969	980	999	985	963	968
17 d	955	952	956	971	976	977	977	977	973	961	957	957	961	961	961	970	972	978	1019	1028	1028	982	987	971	*975*
18	946	940	945	951	967	972	968	968	967	974	979	978	979	979	984	981	984	987	990	991	990	986	982	978	974
19	974	972	951	939	944	952	957	960	963	968	966	967	966	963	966	968	969	972	973	973	974	973	962	957	964
20 q	967	969	970	971	972	973	973	969	967	964	964	960	959	958	958	958	962	968	967	967	967	968	967	968	966
21	967	961	958	961	963	963	968	969	966	963	968	963	959	964	969	973	979	974	974	972	969	970	970	969	967
22 q	969	971	972	974	970	969	964	958	958	957	953	952	953	958	962	963	965	965	965	963	967	973	970	971	964
23	972	971	969	969	970	968	966	964	964	963	959	958	952	963	959	964	974	975	969	972	963	952	903	908	960
24	947	964	970	968	968	968	965	968	968	967	965	967	967	967	968	975	975	975	987	992	983	974	972	972	971
25	970	970	964	958	964	969	973	970	964	969	964	963	959	963	969	973	977	978	975	973	973	964	947	958	967
26	965	969	970	975	975	971	964	964	963	962	965	964	961	967	975	987	993	991	986	986	981	973	969	964	973
27 q	959	968	972	965	975	976	977	977	971	963	959	958	958	960	969	978	983	982	975	970	970	969	966	966	970
28	967	968	966	968	969	968	970	971	965	961	960	958	961	964	961	970	970	969	968	965	964	963	960	960	965
29	968	954	929	953	966	971	971	971	965	960	954	954	954	955	959	968	982	989	988	982	977	972	965	915	963
30 d	890	846	820	818	854	855	905	941	957	965	964	961	965	972	973	970	970	982	993	982	976	976	971	944	935
31	904	888	911	956	970	976	979	983	986	985	981	972	966	966	967	967	971	972	972	974	975	975	975	969	964
Mean	*946*	947	948	951	954	955	957	961	963	965	966	965	965	967	970	974	979	984	*984*	980	979	973	965	959	965

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

31 LERWICK — JULY 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	h. m.	′	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	17 42	487	276	2 37	211	13 51	*48·5*	5·5	0 46	*43·0*	18 12	*1111*	*706*	3 32	*405*	5,4,4,3,4,4,4,4	32	2	87·0
2	16 0	416	*142*	0 47	*274*	12 54	39·0	*3·6*	1 42	35·4	16 45	999	817	0 37	182	5,3,1,1,2,3,2,3	20	1	86·1
3	18 34	402	341	11 27	61	14 30	38·9	21·1	1 53	17·8	20 14	981	895	0 43	86	3,2,2,1,2,1,1,1	13	1	85·9
4 d	15 50	460	324	11 40	136	15 7	41·7	21·3	6 26	20·4	16 18	1012	915	23 59	97	0,1,2,3,3,4,2,3	18	1	85·6
5	18 17	440	302	23 58	138	0 15	42·3	24·2	3 21	18·1	19 35	986	847	0 34	139	4,3,3,3,2,1,3,4	23	1	86·0
6 d	15 53	464	233	7 47	231	6 13	47·5	19·2	4 46	28·3	17 9	1042	815	6 35	227	4,4,4,4,2,3,3,2	26	1	87·0
7	21 7	445	333	11 49	112	21 16	38·7	22·4	22 26	16·3	13 48	998	915	21 49	83	1,2,1,1,2,2,2,3	14	1	87·5
8	16 54	432	284	4 29	148	13 9	38·9	19·4	21 1	19·5	15 17	1006	855	4 27	151	3,4,3,2,3,3,2,3	23	1	87·2
9	18 3	413	341	10 0	72	13 19	37·8	23·0	5 23	14·8	17 30	995	914	0 34	81	3,1,1,2,2,2,1,1	13	1	87·9
10 q	17 52	419	339	11 35	80	13 39	41·9	23·0	5 51	18·9	18 45	984	942	14 32	42	1,1,1,1,2,2,2,1	11	0	88·3
11	19 17	405	335	11 14	70	14 10	38·4	19·6	6 20	18·8	17 32	983	954	0 48	29	1,1,1,1,2,2,1,0	9	0	88·0
12	17 31	414	328	11 17	86	13 55	41·4	22·1	5 14	19·3	19 36	985	955	14 0	30	1,2,2,1,2,1,1,0	10	0	87·5
13	22 15	406	345	9 34	61	13 11	39·2	22·3	6 29	16·9	17 33	980	954	12 0	26	1,1,1,2,2,1,1,2	11	0	87·2
14	15 49	409	322	11 47	87	13 44	38·6	23·4	7 50	15·2	17 13	982	951	14 21	31	1,1,1,2,3,2,1,0	11	0	87·2
15 q	18 34	406	354	10 27	*52*	13 42	37·6	22·2	6 5	15·4	6 20	978	965	16 14	*13*	0,1,0,1,1,2,2,0	7	0	86·6
16	19 55	451	357	11 43	94	14 53	40·5	20·5	22 8	20·0	21 41	1013	952	14 53	61	1,2,0,1,3,3,3,3	16	1	86·4
17 d	17 37	*501*	354	11 1	147	17 50	41·7	13·1	20 20	28·6	20 11	1075	950	2 53	125	2,1,1,2,1,4,4,3	18	1	87·1
18	16 14	418	346	11 51	72	2 56	36·1	25·1	6 39	11·0	19 40	994	936	1 18	58	2,2,2,2,2,2,2,1	15	1	87·9
19	21 40	424	349	10 33	75	13 19	38·4	21·4	7 10	17·0	21 26	979	932	10 47	47	3,2,2,2,1,0,2,2	14	0	89·0
20 q	17 6	402	333	11 23	69	13 24	36·8	23·2	7 43	13·6	6 25	975	958	13 28	17	0,0,1,1,2,1,0,0	5	0	89·1
21	17 13	409	329	10 51	80	13 20	37·2	24·0	6 43	13·2	16 16	982	958	2 0	24	1,0,0,1,1,2,0,0	5	0	89·1
22 q	19 48	426	347	10 19	79	13 30	37·9	22·4	6 17	15·5	21 5	975	951	11 16	24	1,1,1,0,1,1,2,0	7	0	89·0
23	18 46	451	343	10 56	108	21 22	42·8	8·1	22 4	34·7	17 7	981	875	22 19	106	0,1,0,0,3,3,2,5	14	1	89·0
24	17 46	413	332	11 54	81	12 11	39·8	15·5	0 0	24·3	19 24	996	928	0 0	68	3,2,1,2,2,2,1,0	13	1	88·1
25	20 49	407	327	11 24	80	11 44	35·2	20·8	6 57	14·4	17 0	981	942	22 30	39	1,1,1,1,1,2,2,2	11	0	87·9
26	19 45	415	348	11 13	67	13 4	39·2	23·9	8 6	15·3	17 0	997	960	9 0	37	1,0,1,1,2,1,1,1	8	0	87·5
27 q	19 22	405	353	11 42	*52*	13 25	35·8	25·8	6 3	*10·0*	16 21	985	954	0 12	31	1,0,1,0,1,1,1,0	5	0	87·2
28	22 50	415	342	11 11	73	12 45	44·2	18·6	6 44	25·6	7 13	977	951	11 50	26	1,1,2,3,3,2,2,2	16	1	87·3
29	17 19	428	344	9 6	84	15 7	39·0	8·8	22 22	30·2	17 50	992	903	24 0	89	3,2,1,2,2,2,2,4	18	1	87·5
30 d	17 2	426	269	4 20	157	5 2	41·3	5·1	2 35	36·2	18 3	1002	810	2 23	192	4,5,3,2,2,2,2,3	23	1	87·6
31	23 22	398	295	2 0	103	13 51	35·0	16·2	1 20	18·8	8 17	988	881	1 50	107	3,2,1,1,1,0,0,1	9	1	87·5
Mean	− −	426	322	− −	105	− −	39·7	18·9	− −	20·9	− −	997	910	− −	86	−	14·1	0·61	87·5

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

32 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	384	380	381	381	381	377	368	364	362	356	355	355	357	366	374	384	401	402	416	426	411	407	398	395	383
2 d	360	247	286	273	341	384	374	354	348	350	350	354	372	386	382	383	397	400	421	405	392	396	398	387	364
3	381	384	370	375	381	383	375	368	359	347	349	355	369	380	393	391	396	396	393	398	398	392	389	387	380
4	387	384	384	383	379	378	374	368	360	353	347	345	353	364	384	393	397	397	390	388	391	394	399	380	378
5	379	384	384	384	384	376	377	369	359	350	354	353	366	379	383	426	416	402	400	390	384	384	385	385	381
6	384	382	381	365	371	375	382	379	369	355	354	350	349	365	386	384	399	405	395	397	394	389	387	385	378
7	386	385	383	381	384	384	383	375	364	341	323	334	346	368	377	383	394	401	397	402	397	394	387	394	378
8	387	387	387	385	387	384	381	372	358	350	354	359	358	365	376	408	410	414	402	396	399	390	389	388	383
9	385	381	374	377	380	382	378	368	356	346	344	344	347	368	388	390	398	405	406	403	400	396	394	391	379
10 q	389	387	387	387	384	381	375	364	350	332	328	334	347	362	371	383	393	402	407	406	402	397	396	395	377
11	397	400	393	389	389	387	382	372	362	349	347	356	363	371	381	390	389	400	409	414	414	406	411	392	386
12	390	392	378	387	393	392	384	374	359	347	341	345	356	364	372	371	390	402	411	410	407	402	398	398	382
13 d	397	393	390	390	392	386	367	368	342	334	341	346	365	364	375	373	383	393	401	399	398	395	389	385	378
14 d	368	383	384	381	358	372	374	354	342	328	343	354	366	386	383	384	382	418	431	398	385	384	385	394	377
15	385	373	379	381	377	366	372	372	355	341	345	364	373	381	385	393	415	402	393	397	402	389	401	360	379
16	366	357	371	379	377	371	364	357	353	347	345	347	355	372	375	368	375	385	390	396	395	392	393	388	372
17	383	381	380	383	381	381	379	376	365	354	344	350	351	359	354	379	392	388	402	398	398	388	384	383	376
18 q	383	381	381	381	381	381	380	377	368	353	343	339	342	351	372	389	394	399	399	397	392	390	387	386	377
19 q	385	385	386	387	387	384	374	363	356	352	350	349	358	369	377	388	392	393	393	393	394	391	393	390	379
20 q	385	383	385	386	385	381	378	372	367	360	359	366	372	380	385	388	393	396	397	399	398	397	396	393	383
21	393	390	386	385	379	374	372	366	359	355	372	365	389	389	381	393	408	402	403	395	395	391	390	388	384
22	387	385	385	383	377	371	369	371	364	358	351	359	371	385	393	414	417	433	471	410	398	380	386	384	*388*
23 d	370	336	377	332	359	377	372	367	354	339	341	355	364	376	381	381	383	388	390	388	389	383	382	380	369
24 q	379	376	376	368	375	381	377	375	365	347	339	344	356	368	381	386	393	395	394	388	389	390	389	389	376
25	386	384	384	381	379	381	375	368	367	358	348	345	358	372	381	383	389	391	394	394	394	391	389	388	378
26	387	385	385	384	384	384	387	383	377	358	346	346	353	365	377	384	396	402	400	401	402	401	398	397	383
27	394	392	394	388	389	389	384	376	367	358	353	353	358	371	379	402	402	387	398	409	399	398	405	408	386
28 d	399	367	256	105	316	382	372	352	331	315	316	324	347	370	379	397	414	386	379	385	392	375	377	378	*351*
29	384	371	372	375	376	370	363	355	362	350	342	344	355	363	372	376	377	380	380	382	384	379	381	385	370
30	376	376	376	375	376	375	372	366	354	341	350	362	372	379	381	383	384	379	386	388	390	388	388	389	375
31	380	378	378	375	375	372	370	368	363	357	356	362	366	375	382	387	391	389	398	392	384	382	390	393	378
Mean	384	376	375	367	377	379	375	368	358	348	*346*	350	360	371	379	388	395	398	*401*	398	396	391	391	388	378

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

33 LERWICK (D) — 11° + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	31·0	29·3	28·8	27·9	27·1	26·1	27·1	27·6	27·0	28·1	29·9	31·6	33·0	34·9	35·0	34·7	34·0	34·2	34·9	36·0	32·2	29·4	31·3	30·2	30·9
2 d	31·9	25·9	20·0	23·2	29·1	19·0	21·5	23·3	25·2	27·3	31·0	34·7	36·1	38·0	36·6	34·0	33·4	31·9	25·3	29·2	31·9	34·1	32·7	27·7	29·3
3	28·2	27·9	30·4	30·7	28·3	24·9	23·1	23·1	24·0	26·8	29·8	34·0	36·9	36·5	35·0	33·4	33·6	33·9	32·1	31·7	30·7	29·7	27·7	29·1	30·1
4	28·3	29·4	27·4	27·6	27·5	26·4	26·1	25·4	28·0	30·1	31·7	33·4	34·4	35·7	34·9	34·0	32·4	31·0	29·9	29·6	30·0	30·1	28·9	26·6	29·9
5	25·7	27·9	27·5	26·2	24·7	22·2	23·1	24·1	24·0	28·0	31·9	34·9	35·2	37·3	36·8	35·3	32·4	27·8	29·9	30·7	30·8	30·9	29·3	28·9	29·4
6	28·1	27·7	28·4	25·8	29·6	25·8	25·1	25·1	29·1	31·7	33·0	35·0	37·4	38·4	37·5	34·9	32·9	31·0	29·3	29·9	29·8	30·5	31·7	30·1	30·7
7	28·8	28·2	27·0	27·1	25·7	23·0	21·3	21·8	23·8	26·9	28·8	31·4	35·9	37·8	36·6	33·9	31·0	30·5	28·4	27·9	28·7	29·4	24·8	28·0	28·6
8	25·3	26·1	26·2	26·1	25·2	23·5	22·8	23·2	25·1	27·3	30·4	33·9	36·8	38·1	37·7	37·6	34·8	30·9	30·1	31·3	31·9	32·8	29·8	29·0	29·8
9	28·9	29·0	31·0	28·7	27·0	25·1	24·4	25·4	27·0	28·9	30·3	32·1	34·1	35·1	35·2	33·7	31·9	30·4	28·9	29·1	30·0	30·4	29·9	29·0	29·8
10 q	29·0	28·1	27·8	27·6	26·6	25·2	24·0	23·3	23·2	24·5	27·7	31·0	35·9	38·8	38·3	36·1	33·5	32·0	31·3	31·3	31·4	30·8	30·1	29·9	29·9
11	27·9	30·5	27·5	27·2	25·4	24·2	23·3	23·5	25·0	27·6	31·0	34·8	39·1	40·4	39·1	35·7	32·8	31·0	31·1	32·0	32·3	30·1	25·9	23·0	30·0
12	28·1	27·8	30·6	28·8	24·3	23·1	23·1	23·2	24·9	29·8	33·9	37·2	38·7	39·0	38·1	35·4	32·9	31·4	31·9	32·1	32·2	32·7	32·0	31·6	30·9
13 d	30·3	28·1	27·3	25·8	24·5	24·2	27·9	30·8	28·9	29·8	31·9	34·9	37·8	36·8	34·1	33·9	30·6	28·2	29·6	30·7	30·8	30·6	29·9	24·2	30·1
14 d	25·2	27·2	27·7	26·0	27·8	31·1	27·2	30·0	31·7	34·7	35·9	37·8	41·0	40·1	38·3	36·9	32·9	33·2	26·4	30·1	33·0	32·7	31·3	31·0	*32·1*
15	28·3	27·2	26·9	25·9	24·8	24·7	25·7	26·1	25·0	29·0	31·1	31·2	32·8	33·5	31·4	31·3	32·1	31·7	32·8	33·9	32·9	30·1	32·0	24·9	29·4
16	20·3	14·5	21·5	23·4	24·1	23·1	22·6	22·9	23·2	26·1	28·9	32·2	35·5	35·4	33·9	31·9	30·0	29·9	29·3	29·9	29·0	30·4	28·2	27·3	27·2
17	28·4	27·7	27·3	27·4	27·0	26·0	25·3	23·7	24·2	27·3	30·2	32·7	34·4	36·8	36·0	35·0	33·3	30·0	29·8	28·8	30·9	30·9	30·1	29·8	29·7
18 q	29·2	28·9	28·3	27·9	27·1	26·0	25·0	24·0	24·2	26·1	29·1	34·1	37·8	38·1	36·8	34·5	32·1	29·9	28·0	29·1	30·0	30·1	30·1	30·0	29·9
19 q	30·1	29·2	28·7	26·9	26·5	26·0	24·8	25·7	27·1	28·6	30·9	33·1	34·9	34·7	32·6	30·9	30·0	30·1	30·9	30·8	30·7	29·8	28·9	27·6	29·6
20 q	26·7	26·5	27·0	27·0	26·0	25·0	25·9	26·1	27·1	28·2	30·3	32·3	33·5	34·0	34·0	33·3	32·2	31·9	31·4	30·9	30·1	29·3	29·3	28·5	29·4
21	28·3	27·9	27·1	26·9	26·8	25·0	22·5	22·5	22·6	25·2	30·3	35·2	39·1	39·9	38·4	36·2	37·0	34·6	33·7	31·9	31·3	28·2	28·2	28·6	30·3
22	28·6	28·3	28·3	28·1	26·9	25·5	25·0	25·0	27·1	30·4	34·3	38·8	40·9	40·6	38·4	37·8	36·0	36·4	38·0	28·1	27·4	29·8	29·1	27·2	31·5
23 d	25·8	29·9	24·2	32·0	30·9	24·9	23·6	24·9	28·0	30·6	33·9	35·9	37·6	38·1	36·4	33·2	30·9	29·9	29·4	29·4	29·2	27·1	25·8	28·3	30·0
24 q	28·0	27·0	26·0	28·1	27·9	25·0	24·4	24·2	25·2	27·9	30·3	33·9	35·4	35·5	34·2	32·2	30·7	30·0	29·8	28·7	29·1	29·1	28·9	29·1	29·2
25	29·0	28·9	28·9	28·6	27·0	26·6	25·1	25·5	25·2	28·0	31·9	35·2	38·1	38·5	36·6	34·1	31·4	29·9	28·9	29·0	29·6	28·9	28·0	28·0	30·0
26	28·0	28·1	27·9	27·3	26·9	25·9	26·2	26·9	27·4	29·4	32·8	36·3	38·5	38·2	35·8	33·9	30·9	29·9	29·8	30·1	30·2	30·0	29·9	29·0	30·4
27	28·2	28·1	28·9	26·0	26·3	25·0	24·1	23·7	24·9	27·4	30·1	34·9	37·8	37·7	36·1	35·3	34·0	32·0	32·0	32·8	25·0	29·6	30·2	29·0	30·0
28 d	26·5	24·9	15·6	−14·1	5·8	19·2	17·6	20·6	22·8	26·3	29·0	33·0	35·2	37·8	37·0	37·4	32·4	32·9	30·8	28·3	14·3	26·1	28·1	29·0	*24·9*
29	30·2	26·9	28·3	27·0	25·9	24·9	24·1	23·2	24·0	25·9	28·8	31·9	34·4	34·9	35·3	33·4	30·3	29·7	29·3	29·1	29·1	28·2	29·1	26·0	28·7
30	27·6	28·1	28·0	27·0	26·0	25·0	25·3	26·0	27·0	29·7	31·8	34·6	35·0	34·6	32·1	30·9	31·0	30·4	30·1	30·0	31·2	31·2	29·9	27·8	29·6
31	27·0	28·0	28·1	28·5	26·9	26·6	26·3	27·1	28·0	29·0	30·7	32·1	33·1	32·9	32·4	32·0	31·5	31·0	30·6	30·0	28·0	29·0	31·3	25·9	29·4
Mean	28·0	27·5	27·1	25·9	26·0	24·8	*24·3*	24·8	25·8	28·3	31·0	34·0	36·3	*37·0*	35·8	34·3	32·4	31·2	30·4	30·4	29·8	30·1	29·4	28·2	29·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

34 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	962	964	969	970	970	971	971	971	970	969	966	966	965	960	960	964	970	977	975	979	988	979	973	961	970
2 d	919	801	774	755	834	909	951	967	968	971	968	967	962	964	982	983	984	992	1000	993	984	967	933	939	*936*
3	960	961	961	948	956	965	971	976	979	972	968	971	968	967	971	976	978	981	985	985	984	978	973	973	971
4	975	972	966	970	971	970	971	973	974	975	973	974	971	971	969	975	977	978	978	974	972	970	967	960	972
5	967	971	973	974	971	971	967	968	963	962	961	958	959	967	973	980	1006	1017	997	983	977	971	973	974	974
6	976	974	962	917	913	929	945	956	960	963	959	958	962	969	974	984	983	979	979	974	974	972	961	952	961
7	961	968	971	972	972	970	971	971	971	971	973	966	961	963	974	982	990	990	991	984	974	944	951	948	970
8	944	960	968	972	974	976	975	977	975	962	953	956	960	962	965	968	985	1006	1011	994	982	966	952	963	971
9	969	971	971	971	974	978	979	982	979	976	977	975	974	969	972	979	982	984	984	982	976	973	971	972	976
10 q	973	974	975	977	981	980	977	978	973	967	963	952	950	956	962	968	973	973	975	978	973	969	969	969	970
11	956	928	945	963	972	973	970	970	969	967	961	950	947	954	964	978	987	985	978	975	975	975	957	948	964
12	953	952	962	959	966	969	972	973	973	967	961	956	956	963	972	981	981	978	976	978	978	973	971	968	968
13 d	964	958	965	971	975	974	970	956	963	965	969	978	977	995	1012	1012	1013	1006	989	980	979	977	972	955	978
14 d	916	933	941	949	953	925	935	946	951	962	959	953	962	981	1002	1025	1024	1005	1014	1002	981	974	972	967	968
15	953	945	962	969	973	975	973	973	973	968	963	962	965	975	989	990	991	1003	991	980	976	983	934	912	970
16	859	896	943	962	971	976	980	983	981	979	974	964	958	960	968	977	981	979	979	978	977	974	968	963	964
17	966	968	970	971	971	971	971	971	973	973	971	966	964	965	970	969	982	994	989	981	974	974	974	974	973
18 q	974	972	973	971	973	970	969	972	970	971	972	969	965	959	958	965	972	976	984	986	981	977	976	974	972
19 q	971	970	970	971	974	974	977	977	977	971	965	963	964	964	967	966	968	969	968	967	967	969	969	965	969
20 q	965	969	970	970	969	969	969	969	968	964	958	950	948	953	959	962	964	964	963	964	964	965	966	969	964
21	969	968	969	970	969	966	968	968	964	957	943	941	945	955	963	965	970	980	983	980	975	976	971	971	966
22	971	972	972	972	974	974	970	964	963	956	952	953	952	953	963	970	992	1026	1070	1060	1030	999	976	953	*981*
23 d	940	914	884	914	903	944	959	958	960	965	966	969	974	977	985	990	989	986	982	977	975	980	978	969	960
24 q	961	969	973	977	968	968	972	971	974	964	960	960	965	971	974	979	982	982	980	977	973	969	969	969	971
25	970	973	973	974	973	973	974	971	967	964	958	958	958	966	976	985	990	987	983	980	974	972	971	969	972
26	969	971	974	974	974	974	969	968	965	965	964	958	958	963	973	980	979	977	974	969	968	966	967	966	969
27	960	958	954	964	972	975	974	972	969	968	966	963	960	958	961	964	979	987	981	981	996	975	964	960	969
28 d	957	929	736	565	781	914	960	973	977	981	981	980	972	971	980	1000	1015	1002	995	986	970	969	964	960	938
29	937	948	959	959	969	973	975	975	972	974	971	967	962	963	969	973	981	981	977	975	974	978	971	960	968
30	963	966	969	969	970	971	974	974	972	970	965	963	963	964	963	966	970	977	977	977	974	975	974	970	970
31	973	973	971	969	969	971	974	975	974	975	974	971	969	971	973	973	971	969	969	980	986	983	971	955	972
Mean	957	953	949	*945*	956	964	969	970	970	968	965	962	962	965	972	978	984	*987*	986	983	978	973	966	962	968

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

35 LERWICK — AUGUST 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	19 3	440	348	12 7	92	19 19	37·1	25·8	5 34	11·3	20 22	995	953	24 0	42	1,0,1,1,1,1,2,2	9	0	87·1
2 d	18 16	437	212	1 15	225	13 51	39·6	14·2	5 9	25·4	18 5	1006	726	3 18	280	5,5,2,2,3,3,3,3	26	2	87·5
3	16 48	406	342	9 1	64	12 52	38·9	21·0	6 55	17·9	20 13	989	941	3 29	48	2,2,1,2,2,2,2,1	14	1	87·5
4	22 44	419	338	11 58	81	13 35	35·9	23·9	24 0	12·0	18 5	980	953	22 55	27	1,1,1,1,2,2,1,3	12	0	87·6
5	15 47	442	345	9 42	97	13 39	38·0	20·9	5 23	17·1	17 32	1021	956	11 46	65	2,1,1,2,2,3,2,0	13	1	87·8
6	17 38	415	341	12 44	74	13 33	39·7	23·1	3 48	16·6	15 34	989	902	3 40	87	2,2,2,1,2,2,1,2	14	1	87·8
7	17 52	407	314	10 32	93	13 37	38·2	20·7	7 13	17·5	18 30	994	933	24 0	61	1,0,1,2,2,1,2,3	12	1	87·0
8	15 39	427	348	10 15	79	15 32	38·7	22·3	6 41	16·4	18 23	1016	933	0 0	83	2,1,0,2,1,3,2,2	13	1	86·8
9	17 53	410	341	12 2	69	14 30	35·9	23·9	6 43	12·0	18 15	986	968	2 54	*18*	2,1,0,1,2,1,1,0	8	0	87·4
10 q	18 8	409	324	11 3	85	14 19	39·2	22·4	8 6	16·8	4 40	980	947	12 40	33	0,0,1,2,1,1,1,1	7	0	88·5
11	18 52	424	346	9 52	78	13 39	41·1	21·0	23 32	20·1	16 34	988	921	1 25	67	3,2,0,2,2,2,1,3	15	1	89·0
12	18 20	422	337	11 3	85	13 30	39·4	22·1	6 13	17·3	16 33	985	946	0 55	39	2,2,0,1,1,2,1,0	9	0	89·1
13 d	19 17	405	328	8 55	77	13 14	38·5	13·1	23 51	25·4	15 5	1019	931	24 0	88	2,1,2,2,3,2,2,3	17	1	88·5
14 d	18 20	445	325	9 6	120	12 59	42·0	18·1	0 1	23·9	16 11	1033	907	0 27	126	3,3,2,3,3,3,3,2	22	1	88·1
15	16 58	425	331	23 26	94	19 10	35·0	14·5	23 39	20·5	17 43	1008	889	24 0	119	2,1,1,2,2,3,2,4	17	1	88·2
16	22 57	401	339	10 36	62	15 53	36·1	10·2	1 14	25·9	7 53	985	849	0 58	136	4,2,1,2,2,1,1,2	15	1	89·1
17	18 13	412	342	10 22	70	13 56	37·9	22·3	7 48	15·6	17 48	998	963	13 19	35	0,0,2,1,2,2,2,0	9	0	89·7
18 q	18 15	404	333	11 33	71	13 2	38·9	22·1	7 55	16·8	18 48	990	957	14 6	33	0,0,1,2,2,1,1,0	7	0	89·0
19 q	18 47	401	344	11 22	57	12 53	35·1	24·1	6 32	11·0	6 47	980	961	11 50	19	0,0,0,1,0,1,1,1	4	0	88·9
20 q	20 32	401	358	10 29	*43*	12 38	33·9	24·4	5 31	*9·5*	3 3	970	947	11 41	23	0,0,0,1,1,1,0,0	3	0	88·0
21	16 59	423	350	10 1	73	12 52	41·4	21·6	6 34	19·8	18 45	986	936	10 48	50	0,1,1,2,3,2,2,0	11	1	87·3
22	18 47	*516*	347	10 36	169	18 26	*45·8*	23·2	19 45	22·6	18 34	*1102*	948	10 43	154	0,1,1,1,1,4,4,3	15	1	87·1
23 d	18 5	394	281	1 35	113	1 48	39·0	17·4	2 9	21·6	15 54	992	860	2 5	132	4,3,1,2,2,2,0,2	16	1	87·0
24 q	17 14	397	337	10 49	60	13 19	35·9	23·9	6 34	12·0	17 24	984	956	11 11	28	1,2,0,0,0,0,0,0	3	0	87·0
25	19 41	397	344	10 57	53	13 0	38·9	24·3	6 23	14·6	16 53	991	956	10 43	35	0,1,1,1,2,1,1,0	7	0	86·8
26	21 3	403	342	11 1	61	12 50	39·0	25·1	5 33	13·9	15 30	983	957	11 54	26	0,0,0,1,2,2,0,0	5	0	86·5
27	15 50	423	350	11 27	73	13 20	38·1	21·0	20 32	17·1	20 15	1003	951	2 38	52	2,1,0,1,1,3,3,2	13	1	85·7
28 d	16 44	439	*16*	3 17	*423*	13 30	39·7	*−38·9*	3 19	*78·6*	16 44	1025	*470*	3 39	*555*	6,7,3,2,2,3,4,3	30	2	87·0
29	1 39	393	333	10 49	60	14 9	36·0	22·1	7 41	13·9	16 44	983	924	0 49	59	2,2,2,2,1,1,1,2	13	1	87·0
30	20 23	395	337	9 37	58	13 15	35·4	24·4	5 18	10·0	19 7	981	960	0 1	21	1,0,0,2,1,2,1,1	8	0	86·3
31	18 23	402	354	10 27	48	22 37	36·0	24·1	23 25	11·9	20 46	989	968	13 2	21	0,0,1,1,1,2,2,3	10	0	86·0
Mean	− −	417	323	− −	94	− −	38·2	19·4	− −	18·9	− −	998	915	− −	83	−	12·2	0·61	87·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

36 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	381	381	380	381	379	376	371	363	355	349	346	346	357	364	375	385	389	388	401	393	395	388	394	381	376
2	379	378	371	385	392	385	379	368	360	359	356	356	362	371	372	371	385	386	392	389	391	390	390	382	377
3	385	379	379	381	384	383	376	368	364	356	358	362	367	377	376	380	384	393	395	396	396	392	397	401	380
4 d	388	389	381	378	385	384	376	336	315	349	357	344	350	360	362	371	378	392	389	403	390	375	381	378	371
5	373	372	376	378	377	371	364	362	357	346	349	362	362	375	394	376	384	390	393	390	390	384	388	386	375
6	388	382	375	372	377	372	372	364	354	344	349	356	362	358	372	384	382	384	390	393	395	392	392	385	375
7	385	384	377	376	381	388	385	372	364	353	347	350	355	363	384	390	389	388	392	389	389	393	393	388	378
8	384	384	384	384	384	381	375	368	357	347	346	351	359	368	378	383	385	388	388	393	394	410	399	398	379
9	394	392	392	388	390	385	378	372	361	351	353	363	375	384	380	374	384	393	394	394	393	392	390	393	382
10 q	387	388	388	388	385	384	381	375	366	351	350	353	356	367	377	387	389	393	395	394	394	384	385	385	379
11	388	385	381	382	388	386	386	383	372	359	360	362	371	368	376	385	406	409	402	399	389	378	371	381	382
12 d	371	291	361	375	362	369	372	363	357	358	350	358	366	368	384	390	390	388	389	392	391	390	388	390	371
13	384	387	385	384	386	387	385	383	378	360	349	345	355	371	364	376	385	401	396	381	384	386	385	383	378
14 q	381	376	376	384	381	384	383	379	373	366	359	359	363	366	368	372	376	385	392	392	386	384	386	386	377
15 q	387	385	384	384	384	384	384	378	368	362	361	362	370	381	382	384	379	383	389	390	388	389	390	393	381
16	389	386	381	383	386	385	382	384	380	376	372	373	373	370	373	382	392	392	386	386	377	376	386	383	381
17 d	344	365	376	374	377	338	367	374	366	285	299	339	372	444	484	450	477	440	381	375	367	339	358	346	377
18 d	374	352	320	364	394	380	375	359	337	351	342	344	377	389	464	549	609	501	390	381	350	234	258	297	379
19	159	278	382	381	377	375	374	369	359	351	349	349	362	371	375	371	376	384	387	377	371	351	360	361	*356*
20	359	369	369	371	363	383	383	378	368	353	337	349	364	376	386	388	377	384	384	380	383	384	384	383	373
21	381	379	379	379	381	382	380	374	367	359	357	358	363	371	376	374	367	377	390	386	393	386	373	380	375
22	372	375	369	373	376	379	379	375	365	354	348	347	355	359	371	368	372	380	382	384	386	384	383	381	372
23 q	381	378	379	379	383	384	382	371	358	343	338	340	349	359	367	371	376	383	386	388	390	390	390	392	373
24 q	389	388	387	389	390	390	388	381	371	353	345	343	350	364	375	383	384	384	390	393	396	401	402	402	381
25	398	395	393	396	402	406	401	392	381	368	356	348	356	370	378	375	383	394	394	388	388	388	383	391	*384*
26	381	382	381	381	383	383	384	383	376	362	353	354	361	368	369	380	392	385	387	397	394	392	393	395	380
27	394	392	386	368	366	377	382	381	375	367	355	333	324	341	357	364	371	376	385	394	393	394	385	389	373
28	388	381	376	372	381	378	384	384	375	362	347	346	349	355	359	372	381	384	388	387	387	387	389	381	375
29	384	381	381	380	383	387	391	384	371	358	351	353	360	367	377	388	386	380	380	385	393	388	393	389	379
30 d	386	377	372	383	384	397	397	363	351	362	357	335	353	362	372	384	390	399	381	389	388	385	363	377	375
Mean	374	374	377	380	382	381	381	373	363	354	*350*	351	360	370	381	387	*394*	393	390	389	387	380	381	382	376

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -4γ.

MAGNETIC DECLINATION (WEST)
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

37 LERWICK (D) — 11° + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	26·1	27·2	27·7	27·7	27·1	25·7	24·4	23·8	24·2	26·9	29·0	31·0	33·5	34·3	34·1	34·1	32·9	31·4	31·3	30·4	30·0	30·3	26·0	22·1	28·8
2	24·2	21·9	24·4	26·0	24·3	25·0	25·1	27·1	27·6	27·7	29·5	32·7	34·9	35·8	35·2	33·7	31·4	29·9	29·9	29·8	29·6	28·0	26·0	23·3	28·5
3	26·0	27·3	27·2	27·0	26·8	26·0	25·0	24·6	26·0	28·3	31·0	34·2	35·1	35·0	33·6	31·9	31·0	30·9	31·0	30·2	29·8	29·0	28·9	25·1	29·2
4 d	30·0	31·3	21·0	22·7	24·2	23·6	22·4	22·7	29·3	30·9	33·5	36·8	24·0	24·2	35·1	33·2	31·2	30·0	29·0	20·2	20·2	25·9	28·7	28·8	27·5
5	31·0	26·8	25·0	25·9	25·0	24·9	24·0	24·2	26·4	30·0	32·2	35·5	36·8	38·0	36·5	30·0	28·4	29·1	30·7	31·0	31·2	29·9	28·9	27·7	*29·5*
6	27·1	25·0	25·4	24·9	24·4	24·0	25·0	25·3	26·1	27·8	30·0	34·0	36·3	35·6	33·6	31·9	30·0	29·3	27·1	29·0	29·3	29·4	23·5	25·0	28·3
7	27·9	27·1	27·8	27·9	25·4	24·8	24·0	23·4	23·8	26·0	29·3	33·6	36·0	36·7	35·0	33·5	31·4	29·5	29·3	29·2	29·0	27·8	28·3	30·3	29·0
8	31·2	29·1	28·1	26·5	26·5	26·2	25·2	24·4	25·2	27·7	31·2	34·4	35·8	35·2	34·2	32·4	31·0	29·6	29·4	29·1	30·0	30·2	25·9	22·8	29·2
9	24·1	26·4	26·6	26·4	26·7	25·9	24·9	24·2	24·7	26·8	29·9	33·5	35·0	36·2	35·0	32·5	31·3	31·0	31·1	30·4	29·9	29·4	28·8	25·0	29·0
10 q	25·2	27·7	27·7	27·1	27·0	26·7	25·9	24·9	25·5	27·9	30·1	33·2	34·6	34·9	34·4	34·1	32·6	31·3	29·8	31·0	27·9	28·5	27·7	26·9	29·3
11	26·9	26·0	25·8	27·0	26·9	25·7	24·5	25·2	25·0	27·5	29·9	32·6	35·5	35·0	33·7	33·9	34·2	33·7	29·1	30·7	29·7	20·0	20·8	22·4	28·4
12 d	23·8	38·9	24·7	21·2	25·0	25·0	25·0	23·9	24·8	26·0	28·9	32·9	36·9	35·9	34·9	35·2	34·3	32·9	30·1	29·6	29·6	28·8	27·9	28·0	29·3
13	26·8	27·2	27·1	27·7	27·5	27·4	26·8	25·8	25·0	25·6	26·6	29·9	33·3	36·7	37·1	37·5	34·8	33·6	27·0	22·1	29·4	28·2	27·2	25·1	29·0
14 q	26·6	29·3	31·9	27·9	27·3	26·9	25·9	25·6	26·5	27·5	29·0	31·1	33·7	33·4	32·1	31·6	31·1	30·7	29·1	27·9	28·0	28·7	28·5	28·2	29·1
15 q	27·8	27·9	28·0	27·6	27·5	25·8	25·0	25·3	27·3	30·0	32·0	33·6	34·8	34·9	33·7	31·9	30·8	30·2	29·6	29·1	28·6	28·7	28·5	27·0	29·4
16	25·4	25·0	25·4	26·0	26·9	27·0	27·1	27·4	27·9	28·1	28·7	31·6	33·7	34·1	35·3	35·0	33·0	31·4	28·1	27·0	27·3	26·2	27·1	26·1	28·8
17 d	18·0	16·5	17·1	26·0	29·6	29·9	29·9	28·7	27·3	26·3	32·9	35·8	38·9	35·9	41·0	38·0	26·9	24·1	28·3	28·4	24·9	23·8	20·9	27·5	28·2
18 d	20·1	25·3	37·1	30·6	25·1	23·0	23·8	26·8	26·0	28·2	29·9	30·6	33·2	35·8	40·0	38·4	25·5	26·7	24·5	28·7	17·2	16·3	14·1	14·2	26·7
19	17·9	31·5	24·8	26·0	25·9	26·1	24·7	24·0	25·4	28·0	27·6	31·6	33·1	33·0	32·1	29·8	28·4	27·4	26·6	20·3	20·4	23·2	21·1	22·2	*26·3*
20	25·9	29·4	28·7	28·9	29·1	28·3	26·1	25·9	25·1	27·0	29·3	33·3	35·0	35·2	33·9	33·1	31·9	30·6	30·0	28·9	27·6	28·2	28·1	28·0	29·5
21	27·9	27·7	27·1	27·3	27·2	26·8	26·1	25·5	25·1	25·9	28·8	31·3	34·2	36·7	37·1	35·0	34·1	31·3	29·2	27·4	24·0	18·9	19·9	25·0	28·3
22	23·7	23·4	25·4	26·1	28·2	25·9	25·5	25·2	25·2	26·2	28·0	30·8	32·9	33·2	34·0	33·2	31·8	30·5	27·7	27·9	28·3	27·9	26·9	26·8	28·1
23 q	27·4	29·8	28·5	27·4	26·9	26·3	25·4	24·8	24·3	25·4	28·0	31·9	34·9	35·4	34·5	32·3	31·0	30·0	29·7	29·1	28·5	27·9	27·9	27·2	28·9
24 q	27·9	28·0	28·4	28·3	27·9	27·2	26·0	25·8	25·2	26·1	27·5	31·2	35·0	36·5	34·9	32·5	30·9	30·2	29·9	28·8	27·8	28·1	26·9	25·9	29·0
25	26·2	26·4	26·9	26·5	25·2	24·8	24·8	23·5	23·4	25·6	28·9	33·2	35·3	35·9	35·1	31·9	30·6	30·1	29·0	28·7	30·2	28·5	27·8	22·5	28·4
26	24·5	25·5	27·4	27·9	27·0	26·1	25·0	24·2	24·5	26·1	28·3	30·9	32·4	33·4	32·3	32·2	32·0	27·0	27·8	30·9	27·9	28·9	28·8	27·9	28·3
27	27·6	27·1	25·8	26·3	28·0	27·3	25·0	23·4	23·2	25·1	28·1	32·8	34·9	33·9	34·7	34·5	32·6	30·3	29·2	29·3	29·4	27·6	24·1	22·9	28·5
28	25·2	24·2	25·1	28·8	27·9	26·0	23·9	24·0	24·9	26·7	28·7	30·1	32·6	34·2	33·8	32·5	31·0	29·8	28·5	28·8	28·1	27·2	26·8	25·9	28·1
29	28·0	27·8	27·8	27·7	27·6	27·2	27·1	24·9	24·1	25·4	28·4	31·7	34·3	34·7	34·1	33·8	32·4	30·4	26·8	28·6	23·2	27·0	28·8	27·9	28·7
30 d	28·3	28·1	30·9	27·0	26·8	25·6	25·4	28·6	31·5	27·1	32·5	34·0	38·0	37·7	35·1	32·9	31·7	31·8	30·1	31·0	25·1	22·0	24·8	17·0	29·3
Mean	26·0	27·2	26·8	26·8	26·7	26·0	25·3	*25·1*	25·7	27·1	29·6	32·7	34·5	*35·0*	34·9	33·4	31·3	30·2	29·0	28·5	27·4	26·8	26·0	25·2	28·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

38 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	966	971	971	972	974	975	976	978	980	977	975	972	969	969	964	961	963	966	966	975	976	980	968	971	971
2	965	958	960	959	959	965	966	968	967	963	963	963	966	971	978	978	974	974	970	970	971	975	969	965	967
3	960	965	971	971	971	971	971	974	974	971	965	965	965	965	967	970	971	971	971	975	975	975	970	963	969
4 d	951	928	916	943	956	965	967	975	964	952	956	971	983	980	976	976	982	993	1001	987	974	975	974	971	967
5	955	937	959	967	971	974	975	971	969	966	967	964	963	969	982	1007	1007	992	988	980	975	976	969	961	973
6	958	958	965	963	969	971	970	969	965	965	964	966	973	982	980	975	976	976	980	972	967	965	960	961	969
7	965	969	970	966	965	965	965	968	968	964	965	963	963	967	972	978	982	982	977	974	972	969	963	962	969
8	960	964	968	971	974	975	974	972	970	967	964	962	966	967	971	975	977	977	976	973	969	962	965	958	969
9	953	962	967	972	972	974	975	972	969	967	961	958	958	961	974	974	972	972	972	971	971	970	970	954	968
10 q	958	964	968	971	971	972	971	971	970	965	958	950	952	958	958	963	971	972	976	975	975	975	972	970	967
11	967	966	965	965	967	971	971	969	971	969	965	960	959	962	963	967	968	987	1023	1032	984	901	907	951	967
12 d	954	840	849	916	940	958	961	971	973	969	969	963	964	977	979	978	980	985	986	980	980	975	972	964	958
13	966	966	966	968	968	969	971	972	970	972	972	969	966	969	974	972	975	982	1007	1010	987	978	974	971	975
14 q	969	963	958	956	964	969	972	975	974	973	970	967	962	960	961	964	967	969	971	974	977	978	976	974	968
15 q	970	969	966	965	965	968	969	971	972	972	970	967	964	963	964	964	965	965	966	969	972	972	969	966	968
16	965	965	965	965	965	965	966	966	969	968	963	956	952	950	950	954	961	973	981	986	987	986	977	961	967
17 d	889	810	847	837	848	889	912	942	957	993	994	986	993	1038	1065	1065	1077	1058	1029	1001	994	900	867	900	*954*
18 d	888	920	900	886	932	948	960	965	976	977	990	1012	1012	1012	1037	1113	1176	1134	1034	1034	965	779	781	760	966
19	796	803	917	958	967	973	974	975	976	979	982	982	976	980	985	987	987	980	987	998	986	974	954	950	959
20	953	958	959	962	955	942	959	964	968	975	981	976	974	975	978	981	981	978	979	982	977	975	975	976	970
21	977	979	980	978	976	975	976	976	975	973	969	966	970	975	991	1010	1004	998	991	992	975	959	964	960	*979*
22	943	952	960	966	967	972	974	974	974	974	974	975	974	975	976	978	978	976	981	978	975	974	974	971	971
23 q	970	966	968	974	975	975	975	976	976	975	969	965	962	963	968	973	975	975	974	972	970	969	968	967	971
24 q	968	971	973	973	974	974	974	974	973	971	969	962	953	952	963	971	974	976	977	974	969	965	952	946	968
25	953	960	966	968	968	968	970	970	965	960	960	958	953	953	960	971	973	973	988	991	980	976	974	958	967
26	960	966	969	967	971	975	976	974	973	972	971	963	958	959	963	968	978	992	991	980	984	980	975	970	972
27	969	968	966	969	954	959	970	975	975	971	970	977	976	965	965	967	973	978	978	975	975	973	969	964	970
28	947	945	943	931	931	955	964	965	965	965	970	969	970	965	966	969	970	971	974	976	976	975	973	970	963
29	969	968	967	968	967	966	965	970	973	974	970	965	961	962	965	969	978	993	1003	989	977	973	966	966	972
30 d	969	966	937	938	958	963	965	974	967	967	967	972	965	971	980	981	980	986	1016	1025	1027	995	949	933	973
Mean	951	*946*	951	955	960	965	968	970	971	970	969	968	967	975	976	982	986	987	*987*	986	978	963	956	954	968

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

39 LERWICK — SEPTEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1	18 39	414	341	11 1	73	12 57	35·6	20·7	23 36	14·9	21 8	985	958	15 42	27	1,0,0,1,1,1,2,3	9	0	86·2
2	22 8	396	348	9 10	48	13 50	36·2	21·1	1 40	15·1	15 2	980	953	3 0	27	2,1,2,2,1,1,0,2	11	0	86·2
3	23 31	408	352	9 58	56	12 37	35·8	22·9	23 52	12·9	19 55	976	958	0 53	18	1,0,1,2,1,1,1,2	9	0	85·3
4 d	19 44	419	289	8 14	130	12 0	39·9	13·2	19 30	26·7	18 15	1006	908	2 10	98	3,3,4,3,3,2,3,2	23	1	87·0
5	18 4	409	341	9 32	68	13 13	38·8	22·3	6 32	16·5	15 52	1018	936	1 2	82	2,1,2,2,2,2,2,2	15	1	87·1
6	22 52	402	338	9 15	64	12 31	37·1	22·1	22 37	15·0	14 5	984	954	22 54	30	2,1,1,2,2,1,2,2	13	1	86·8
7	22 12	403	342	11 58	61	13 15	37·7	22·6	7 0	15·1	17 57	985	958	22 19	27	1,2,1,1,2,1,1,2	11	0	86·7
8	20 59	419	344	10 12	75	13 6	36·3	21·0	23 39	15·3	18 22	982	948	23 41	34	1,1,1,2,1,1,2,3	12	1	86·8
9	23 42	399	349	10 6	50	13 56	36·9	21·7	0 0	15·2	14 43	978	947	23 47	31	2,0,1,2,2,1,0,2	10	0	86·9
10 q	20 21	401	342	10 37	59	13 23	35·1	22·6	0 0	12·5	19 20	979	944	23 59	35	2,0,0,2,1,1,2,0	8	0	87·0
11	21 7	442	315	21 46	127	20 38	38·8	7·1	21 57	31·7	19 2	1056	878	21 40	178	0,0,1,1,2,2,4,4	14	1	87·1
12 d	15 5	398	239	1 50	159	1 33	47·1	19·1	3 50	28·0	18 27	987	765	1 53	222	5,3,2,2,2,2,1,1	18	1	87·0
13	17 29	410	341	11 26	69	15 7	39·0	14·2	19 19	24·8	19 15	1026	964	13 3	62	0,0,1,1,3,2,3,2	12	1	87·1
14 q	20 50	396	354	11 9	42	13 7	34·6	24·4	7 5	*10·2*	21 0	981	953	2 55	28	2,2,1,1,1,1,1,1	10	0	87·0
15 q	22 48	394	355	11 18	*39*	13 22	35·2	24·3	6 45	10·9	21 0	975	959	13 10	16	0,0,1,1,1,1,1,1	6	0	86·5
16	24 0	406	367	12 41	*39*	14 33	35·7	18·1	24 0	17·6	20 22	988	930	24 0	58	1,1,1,1,2,2,1,3	12	1	86·3
17 d	16 38	559	260	21 19	299	14 43	46·6	8·0	1 56	38·6	16 34	1136	794	1 9	342	5,3,3,4,4,5,4,5	33	2	86·4
18 d	16 42	*772*	96	21 38	*676*	2 50	*50·1*	*-9·8*	21 49	*59·9*	15 57	*1263*	*623*	21 37	*640*	4,4,3,3,5,6,5,6	36	2	86·0
19	18 1	393	*17*	0 35	376	1 3	46·8	2·7	0 5	44·1	19 30	1005	750	1 7	255	7,2,1,1,1,1,3,2	18	1	85·5
20	15 9	404	320	10 38	84	13 8	35·8	21·6	0 0	14·2	10 40	985	937	5 20	48	3,2,2,2,1,2,1,0	13	1	85·1
21	20 40	405	353	11 31	52	14 21	39·1	16·5	22 19	22·6	15 40	1014	948	23 59	66	0,0,0,2,2,2,3,3	12	1	85·3
22	20 21	389	341	11 9	48	14 15	34·8	22·5	1 42	12·3	18 33	984	942	0 42	42	2,2,0,0,1,1,1,0	7	0	85·3
23 q	23 22	398	335	11 4	63	13 5	35·8	24·0	7 56	11·8	8 55	976	961	13 4	*15*	1,0,1,1,1,0,0,0	4	0	85·3
24 q	22 3	414	341	11 10	73	13 33	36·8	24·5	23 51	12·3	18 12	980	943	23 17	37	0,0,0,1,1,1,1,2	6	0	85·0
25	23 22	418	337	11 26	81	13 38	36·8	18·1	23 19	18·7	19 0	994	948	23 24	46	1,1,0,2,2,2,2,3	13	1	84·8
26	20 14	402	349	11 13	53	12 20	34·9	22·4	0 0	12·5	17 40	1002	955	12 54	47	2,0,0,1,2,2,2,1	10	0	84·3
27	21 48	408	315	12 0	93	11 59	36·7	21·4	7 19	15·3	12 0	981	952	4 38	29	1,2,1,3,2,1,2,2	14	1	84·2
28	0 23	397	341	10 37	56	13 42	35·1	22·0	0 0	13·1	18 50	981	917	3 52	64	2,3,1,1,1,0,1,1	10	1	84·0
29	20 35	406	346	11 7	60	12 47	34·9	19·3	20 33	15·6	18 21	1009	960	13 4	49	0,1,1,1,0,2,2,2	9	0	83·7
30 d	17 40	408	325	11 22	83	12 48	40·4	14·4	23 18	26·0	19 51	1049	921	2 42	128	3,2,3,2,2,2,3,4	21	1	83·6
Mean	- -	423	314	- -	109	- -	38·1	18·2	- -	20·0	- -	1008	915	- -	93	-	13·3	0·63	85·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

40 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	362	377	374	376	381	383	382	377	369	357	351	351	357	364	369	374	376	373	380	379	369	366	376	382	371
2	383	382	381	383	385	388	390	384	372	352	349	347	351	371	364	371	377	386	381	384	384	385	384	383	376
3 q	379	385	383	383	385	386	385	379	370	355	352	353	353	360	371	381	379	386	387	388	387	386	386	387	377
4 q	385	383	384	387	388	388	389	384	373	359	353	353	359	367	376	384	385	391	391	391	393	388	384	383	*380*
5	387	381	379	382	390	391	391	379	373	360	346	351	357	363	371	376	390	406	385	384	383	384	381	381	378
6	382	381	382	383	383	383	381	373	360	342	327	325	334	351	366	374	379	380	384	385	375	390	372	378	376
7	378	378	379	379	379	380	379	374	366	351	340	340	351	363	370	377	381	384	385	392	406	333	291	355	367
8	372	374	369	372	375	376	381	372	364	359	353	358	351	363	366	387	363	374	378	381	382	381	383	382	371
9	381	381	379	380	381	382	381	368	368	356	350	351	348	352	357	363	369	378	381	382	383	381	381	381	371
10 q	381	378	379	381	382	383	381	376	366	350	344	348	353	361	376	377	379	382	383	384	384	384	385	383	374
11 q	383	382	381	381	381	381	381	376	368	354	348	349	356	366	374	383	386	388	391	390	390	390	392	391	378
12 d	390	387	388	390	391	392	387	383	387	377	377	365	358	437	435	370	360	399	353	353	357	357	350	282	376
13	354	355	353	366	372	369	368	359	332	347	347	350	348	359	364	369	369	370	375	387	377	368	356	345	361
14	369	374	377	376	376	380	374	372	372	364	355	350	355	353	362	373	372	381	373	378	372	374	370	368	370
15	365	372	374	380	380	377	378	377	368	359	351	351	357	366	375	377	373	362	377	381	382	383	374	376	371
16 d	378	377	374	376	381	369	368	372	359	354	351	356	360	376	391	395	370	372	361	369	372	376	377	375	371
17	376	375	375	377	379	386	382	372	354	335	322	334	344	354	364	368	369	365	376	368	369	378	378	380	366
18	376	373	373	372	376	378	370	372	365	353	350	350	361	363	371	368	372	377	374	361	368	372	373	370	368
19	361	378	379	380	381	384	383	376	366	356	357	357	357	365	372	377	376	377	376	383	396	381	315	337	370
20	321	355	371	370	374	373	369	365	359	353	354	359	370	372	375	378	379	387	386	385	396	375	369	368	369
21	375	377	378	378	381	382	380	376	370	360	358	361	367	372	377	384	377	382	383	387	385	384	376	383	376
22	382	381	382	383	384	383	381	376	370	358	354	351	361	371	381	366	356	365	379	383	383	378	372	371	373
23	379	373	374	374	374	374	374	370	363	353	351	354	362	372	377	381	385	386	387	387	386	385	383	387	375
24 d	385	381	375	369	373	388	379	373	343	331	335	311	308	358	369	353	364	401	442	475	360	336	239	150	354
25 d	149	220	157	291	359	374	374	375	352	294	294	313	313	372	451	436	422	394	365	379	374	370	367	336	340
26 q	369	366	360	368	369	369	369	366	360	350	344	344	350	357	365	366	369	374	373	373	373	373	372	372	365
27	370	370	371	374	376	377	377	375	373	362	356	356	361	373	374	383	375	368	376	372	353	281	169	41	344
28 d	-170	-84	225	257	329	362	366	362	357	354	353	348	366	372	369	368	384	377	372	376	402	353	364	370	*314*
29	374	368	362	360	368	373	371	368	361	352	337	345	355	368	369	374	375	372	374	377	382	373	368	370	366
30	369	368	366	369	370	372	372	370	364	358	357	357	361	357	371	373	377	383	375	372	375	378	378	374	369
31	376	370	370	372	374	377	376	372	365	357	357	362	370	373	372	374	375	379	376	374	379	386	387	380	373
Mean	349	355	363	370	377	379	378	373	364	352	*347*	348	353	367	376	377	376	381	380	*383*	380	372	360	353	367

Correctiona to be applied to all values: H, −6γ; D, −4·3′; V, −4γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

41 LERWICK (D) — 11° + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	23·0	19·9	21·5	26·1	26·0	26·1	26·1	25·1	24·4	25·7	27·6	30·4	32·2	32·7	31·9	30·2	28·6	27·7	26·8	28·2	18·3	20·2	27·1	27·9	26·4
2	28·1	27·8	27·8	27·8	27·1	26·8	26·4	25·2	25·1	27·1	31·3	33·7	35·0	36·8	36·2	32·2	30·7	29·7	29·1	28·7	28·4	27·3	27·4	27·2	29·3
3 q	28·1	27·1	27·3	26·4	26·7	26·8	26·0	24·9	23·2	24·9	27·5	31·8	33·9	34·1	32·8	31·7	29·7	28·9	29·2	28·8	28·6	28·4	28·0	27·4	28·4
4 q	27·2	27·8	27·9	27·6	27·4	27·1	25·9	24·1	22·9	24·2	27·0	30·1	33·1	33·7	32·9	31·8	30·2	30·0	30·0	29·5	29·3	28·7	27·9	27·3	28·5
5	24·9	23·9	25·0	26·2	23·1	23·5	23·9	23·2	23·9	25·7	30·1	36·0	37·8	38·7	38·6	35·9	34·5	35·8	34·9	28·4	24·5	22·6	26·2	27·5	28·9
6	27·9	27·5	27·6	27·2	27·0	26·7	25·9	25·0	24·2	25·0	28·3	31·9	34·1	34·9	34·5	32·0	30·1	29·3	29·1	28·9	24·9	23·5	23·7	21·9	28·0
7	25·4	27·1	27·9	27·2	26·9	26·9	25·6	24·0	23·6	24·9	27·3	30·8	33·2	33·9	32·1	30·5	29·9	29·7	28·7	28·8	30·1	24·6	15·6	7·1	26·7
8	20·2	25·9	26·3	26·0	25·4	25·0	24·0	22·9	23·3	24·8	27·5	34·1	36·2	38·1	37·7	36·3	36·9	30·4	28·8	28·2	27·8	27·2	27·2	27·1	28·6
9	27·9	27·9	27·2	27·3	28·4	31·9	30·6	28·3	28·2	29·0	29·7	31·1	33·0	34·1	33·4	31·8	29·0	28·3	28·0	27·9	27·6	27·2	27·1	26·8	29·2
10 q	26·9	27·1	27·2	27·4	27·2	27·0	26·2	25·0	24·3	25·3	29·2	33·2	34·0	34·3	34·2	32·1	31·1	30·1	28·8	28·1	28·0	27·8	27·6	27·6	28·7
11 q	27·3	27·2	27·2	27·3	27·3	26·8	26·2	25·3	24·8	26·0	28·8	31·8	33·6	34·1	33·1	31·5	30·5	30·2	30·2	29·8	29·1	28·6	28·2	28·2	28·9
12 d	27·2	27·4	27·5	27·4	27·2	25·3	24·6	25·8	24·7	26·4	32·9	38·9	42·1	41·6	36·0	39·7	33·1	29·5	12·0	26·4	21·5	16·4	21·3	25·8	28·4
13	25·6	23·4	27·0	28·8	27·7	27·8	30·0	30·8	28·2	29·2	32·8	34·6	34·2	33·7	32·7	29·9	28·0	27·6	26·4	22·5	24·4	23·7	21·2	22·1	28·0
14	21·6	25·4	25·8	26·3	26·8	26·3	26·8	28·9	28·1	28·1	30·4	33·7	35·4	34·9	34·8	32·1	28·0	24·9	29·8	27·1	18·8	18·2	20·0	22·6	27·3
15	24·7	26·2	25·8	24·7	25·7	27·1	26·8	26·1	25·8	27·9	30·2	32·6	34·9	33·2	33·1	32·5	32·1	31·8	28·9	28·4	28·1	27·3	24·2	25·0	28·5
16 d	26·1	26·9	26·7	28·0	25·3	25·1	30·0	31·7	29·9	32·2	35·6	37·6	39·8	39·7	44·5	44·1	30·9	26·5	22·2	24·2	25·9	26·8	27·2	27·7	*30·6*
17	28·7	28·2	28·3	27·8	27·6	26·9	27·9	27·9	27·7	30·2	32·5	35·6	37·0	37·4	36·1	33·8	29·1	29·1	29·0	21·9	25·1	28·0	27·2	27·2	29·6
18	28·1	25·9	26·7	26·3	27·9	27·3	28·2	25·6	25·8	27·6	32·1	34·8	35·5	34·8	33·4	31·2	30·0	29·7	29·5	29·4	26·6	27·2	26·5	25·9	29·0
19	28·1	27·5	27·3	27·0	27·1	26·7	26·3	25·9	25·9	28·3	32·1	34·8	36·4	34·8	33·4	31·2	30·7	32·2	30·5	29·4	20·7	13·2	25·0	21·8	28·2
20	18·4	15·4	23·6	26·8	26·8	25·6	25·2	24·7	25·0	27·1	29·9	31·8	32·6	30·4	29·1	28·2	28·6	29·1	29·4	29·8	22·3	21·6	22·7	24·1	26·2
21	27·4	27·8	27·2	27·0	26·5	26·1	26·0	26·1	26·1	26·8	30·4	31·6	31·7	31·8	30·9	30·0	29·1	29·2	28·7	28·2	25·9	28·3	22·6	24·2	27·9
22	27·1	27·8	27·2	27·2	27·0	26·2	26·0	25·3	25·1	26·2	30·0	32·8	36·7	37·1	40·7	40·8	32·8	28·9	27·3	27·2	27·9	24·2	23·2	23·2	29·1
23	29·1	27·1	26·1	26·8	26·2	25·8	25·6	25·1	25·0	26·9	28·9	31·2	32·0	32·3	31·0	29·9	24·2	29·2	29·2	28·5	27·8	27·3	25·5	24·1	27·7
24 d	27·3	25·1	23·1	26·6	25·6	25·4	24·7	24·3	27·0	33·2	33·9	35·8	37·2	33·3	35·2	31·0	29·5	31·1	28·0	25·3	16·2	16·7	9·0	9·0	26·4
25 d	5·2	-23·2	-8·9	-7·9	18·8	24·8	26·0	28·3	28·5	31·1	35·2	33·2	36·8	37·6	39·0	34·6	35·0	30·0	31·2	25·9	25·7	25·5	25·4	24·2	23·4
26 q	22·8	23·2	24·2	25·3	26·1	26·0	26·0	26·2	26·3	27·2	28·6	29·9	30·2	30·0	29·2	28·8	28·8	28·8	28·2	28·0	27·5	25·3	26·8	25·8	27·1
27	25·8	26·2	26·5	26·6	26·6	26·1	26·1	25·9	25·1	26·0	27·8	29·8	30·2	31·7	31·2	31·2	32·0	30·0	28·8	26·2	22·3	17·6	19·4	1·9	25·9
28 d	-4·5	1·8	13·2	8·4	23·3	22·6	24·4	24·3	24·0	26·0	30·3	32·0	34·1	35·0	34·2	33·7	32·0	29·3	20·6	27·0	12·7	10·1	25·2	26·1	22·7
29	27·9	25·1	23·0	25·1	26·2	24·7	24·7	24·4	24·4	26·0	28·8	31·2	33·0	33·9	32·3	30·1	29·0	25·2	30·1	28·3	26·8	27·9	19·4	25·6	27·2
30	23·1	23·1	25·2	24·1	24·6	24·3	25·1	25·2	25·0	26·3	29·2	32·1	34·1	28·9	30·1	29·7	27·7	23·8	26·2	26·9	26·6	26·8	26·0	26·3	26·7
31	26·0	25·9	25·1	25·1	26·1	25·8	25·5	25·4	25·3	27·0	29·0	30·5	31·3	31·0	29·2	29·0	29·0	28·4	26·4	25·7	27·1	27·3	27·4	22·8	27·1
Mean	24·3	*23·4*	24·6	25·0	26·2	26·2	26·2	25·8	25·5	27·2	30·2	32·9	*34·6*	34·5	34·0	32·5	30·3	29·2	27·9	27·5	25·1	24·1	24·2	23·6	27·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

42 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	937	931	952	970	974	975	977	980	983	986	987	982	978	976	976	977	982	986	986	987	982	970	973	973	974
2	974	975	975	974	972	972	974	976	977	980	979	977	975	975	988	991	981	978	980	978	975	974	974	974	977
3 q	974	964	968	971	971	972	975	978	980	977	975	975	975	975	974	978	982	978	975	973	972	971	971	972	974
4 q	973	975	975	975	975	972	974	976	979	978	975	973	970	970	971	973	973	970	970	969	969	971	974	975	973
5	968	969	971	967	961	965	966	970	971	971	970	965	970	978	987	992	1005	1024	1081	1062	1037	1029	1000	987	*990*
6	981	980	980	979	979	977	977	977	977	974	970	969	969	970	975	984	984	978	975	975	982	966	967	959	975
7	965	970	974	975	975	975	975	975	974	972	972	969	965	965	969	971	973	973	972	969	965	922	813	876	959
8	934	965	976	980	977	975	972	975	971	971	971	972	982	985	998	1011	1011	990	982	977	975	973	971	970	978
9	971	971	973	975	974	965	961	970	968	969	969	966	965	967	975	979	980	979	976	975	974	973	973	970	972
10 q	969	971	972	972	974	975	975	978	980	978	975	969	969	969	969	974	972	974	974	974	972	971	971	971	973
11 q	970	970	971	971	973	973	975	976	975	972	969	967	965	965	966	969	970	970	971	971	971	970	969	968	970
12 d	967	968	968	966	966	967	969	966	964	959	954	965	984	1034	1079	1022	1015	1062	1071	1014	959	956	933	873	983
13	872	931	945	954	964	967	969	973	985	984	979	979	980	977	978	984	988	987	984	979	974	968	943	915	965
14	915	947	958	963	966	966	970	970	971	972	971	970	973	980	980	980	996	1002	997	996	997	961	928	938	969
15	950	958	961	964	966	971	974	977	978	977	977	975	975	975	982	989	997	1001	989	984	982	980	984	980	977
16 d	975	975	975	969	965	968	962	958	966	969	967	969	977	1001	1023	1056	1064	1038	1032	1006	991	982	979	978	989
17	973	975	977	976	976	972	974	975	980	982	988	989	988	991	996	1004	1023	1013	994	999	988	980	978	963	986
18	939	952	964	967	965	965	970	975	975	974	975	982	985	992	997	993	987	987	993	1004	1000	992	986	981	979
19	978	975	979	979	976	974	974	975	977	977	974	977	985	987	992	994	998	1004	1007	998	982	919	878	872	972
20	805	871	925	954	963	969	971	970	968	968	969	970	971	974	976	976	975	972	974	973	969	970	973	975	*958*
21	975	979	980	979	977	975	972	971	971	970	966	969	970	973	977	980	982	976	975	971	974	969	941	954	972
22	965	972	974	975	975	974	972	971	970	965	960	965	965	980	993	1020	1036	1029	1002	985	979	982	980	980	982
23	976	980	980	981	980	980	978	977	975	972	970	969	969	970	974	977	980	982	978	977	977	975	975	974	976
24 d	970	971	966	916	932	943	958	962	969	962	958	1009	993	971	974	984	983	975	1025	1036	976	939	879	809	961
25 d	802	687	683	738	819	903	944	959	974	1004	997	1002	1012	1025	1066	1085	1096	1139	1067	1072	1060	1018	996	982	964
26 q	977	973	975	969	975	980	982	985	988	988	987	986	982	981	981	982	982	983	983	983	983	984	981	980	981
27	980	978	976	975	976	977	978	981	982	981	980	981	980	977	988	997	1005	1009	1019	1035	1000	945	817	654	965
28 d	826	761	871	900	933	944	973	982	984	981	980	982	982	987	992	997	993	1031	1018	1019	978	971	991	981	961
29	968	973	969	970	973	977	980	981	984	981	982	977	980	982	986	986	988	993	991	997	993	964	958	954	979
30	965	973	979	981	980	979	979	978	978	975	976	979	986	1003	994	988	987	985	985	987	983	981	981	982	982
31	975	974	973	978	978	977	977	977	978	978	978	980	980	981	981	979	977	976	981	982	978	974	954	963	976
Mean	947	949	957	960	965	969	972	974	976	976	974	976	977	982	989	993	996	*998*	997	994	984	971	955	*945*	974

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -4γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

43 LERWICK — OCTOBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +	Minimum 11° +	Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	4 57	387	347	10 26	40	12 58	33·2	8·4 20 30	24·8	19 50	991	925	1 12	66	3,1,1,0,0,2,4,3	14	1	84·4
2	6 54	394	341	10 53	53	13 50	38·8	23·7 8 25	15·1	15 15	995	970	5 10	25	0,1,1,1,2,1,0,0	6	0	84·6
3 q	20 0	389	348	12 47	41	12 22	35·0	22·6 8 45	12·4	16 34	984	959	1 31	25	1,0,1,1,1,1,0,0	5	0	85·0
4 q	20 10	398	350	10 50	48	13 15	33·9	22·9 8 21	11·0	8 55	979	967	20 8	12	0,0,1,0,0,0,0,0	1	0	85·0
5	17 42	417	343	10 46	74	18 7	41·2	20·9 21 43	20·3	18 40	1101	955	4 6	146	2,2,1,2,2,3,3,3	18	1	85·0
6	21 9	411	322	11 19	89	13 44	35·3	20·1 23 37	15·2	20 47	987	957	21 14	30	0,0,1,0,2,1,2,3	9	1	84·6
7	19 40	418	219	21 55	199	21 51	38·4	-4·4 23 7	42·8	18 30	975	754	22 20	221	2,0,0,0,1,0,2,5	10	1	84·2
8	15 43	400	347	12 1	53	15 59	43·4	16·9 0 10	26·5	16 13	1018	909	0 1	109	3,0,1,2,2,3,1,0	12	1	83·8
9	5 29	388	347	12 50	41	14 3	34·8	26·2 21 44	*8·6*	16 50	981	956	6 11	25	1,2,2,2,1,1,0,0	9	0	83·8
10 q	17 39	386	342	10 19	44	14 42	35·1	24·0 8 14	11·1	8 30	981	967	11 54	14	0,0,0,1,1,0,0,0	2	0	83·4
11 q	22 7	397	347	10 42	50	13 8	34·4	24·3 8 32	10·1	7 40	976	965	12 34	*11*	0,0,0,0,0,0,0,0	0	0	83·0
12 d	14 1	581	249	23 26	332	13 37	48·8	5·3 18 14	43·5	17 59	1152	824	23 53	328	0,0,2,3,5,5,5,5	25	1	82·1
13	19 53	392	303	0 0	89	11 50	35·3	16·2 23 51	19·1	8 54	993	836	0 1	157	4,2,2,2,1,1,2,4	18	1	82·0
14	21 50	404	344	13 33	60	12 18	36·0	7·8 21 49	28·2	16 57	1013	896	0 1	117	3,0,2,0,2,3,3,3	16	1	82·0
15	20 40	385	338	11 11	47	12 20	37·8	22·3 22 45	15·5	17 24	1004	943	0 1	61	1,1,1,2,2,2,1,2	12	1	82·3
16 d	14 10	413	344	10 33	69	15 21	50·1	20·3 18 18	29·8	16 10	1076	953	7 20	123	1,2,2,2,3,4,3,1	18	1	82·9
17	5 45	390	318	10 1	72	13 12	38·2	10·3 19 52	27·9	11 42	1029	949	23 59	80	0,1,2,2,1,2,4,2	14	1	83·1
18	0 8	383	344	10 41	39	12 16	35·8	23·2 23 39	12·6	19 38	1009	937	0 20	72	2,1,1,1,1,1,2,2	11	0	83·1
19	21 3	446	279	22 9	167	12 17	37·8	7·6 21 41	30·2	18 45	1009	827	23 59	188	2,0,0,1,2,2,3,5	15	1	83·2
20	20 43	415	266	0 17	149	12 22	34·3	9·3 1 8	25·0	20 20	978	792	0 29	186	5,2,1,2,2,1,4,3	20	1	83·3
21	21 45	398	355	10 30	43	21 48	37·1	16·0 22 42	21·1	16 30	983	925	22 8	58	1,0,1,1,0,2,3,4	12	1	83·3
22	23 57	388	346	11 16	42	15 19	42·1	20·5 21 34	21·6	16 51	1039	959	0 1	80	1,0,0,1,3,3,3,2	13	1	83·7
23	23 59	394	347	10 55	47	12 53	32·9	21·6 23 7	11·3	17 42	982	965	23 59	17	2,0,0,1,1,1,0,2	7	0	83·7
24 d	19 37	*584*	-71	23 50	655	11 35	42·0	-12·1 20 29	54·1	19 48	1068	727	23 50	341	3,3,3,3,4,4,6,7	33	2	83·6
25 d	14 19	542	-10	0 0	552	14 11	48·2	-38·5 1 51	86·7	17 20	*1167*	625	1 46	*542*	6,5,3,4,5,4,3,3	33	2	83·5
26 q	17 2	378	343	11 35	*35*	12 5	30·8	21·2 21 23	9·6	9 10	989	967	3 21	22	2,1,0,1,0,1,0,2	7	0	83·2
27	15 52	389	-164	23 51	553	16 6	32·7	-29·5 23 53	62·2	19 29	1042	*597*	23 44	445	0,0,1,0,1,2,3,7	14	1	83·0
28 d	20 7	457	*-353*	0 47	*810*	1 4	*88·9*	*-40·2* 1 40	*129·1*	0 58	1063	604	1 22	459	8,5,2,2,3,4,4,4	32	2	82·3
29	21 14	391	327	10 39	64	21 18	36·9	16·7 21 56	20·2	19 38	1001	947	21 37	54	2,2,1,2,2,2,2,4	17	1	81·3
30	17 14	390	337	13 12	53	12 39	34·9	19·4 17 7	15·5	13 38	1007	958	0 1	49	2,0,1,1,2,2,0,1	9	0	80·9
31	21 59	400	355	10 33	45	11 55	31·7	21·1 23 27	10·6	18 55	985	952	22 35	33	1,1,0,1,2,1,1,2	9	0	81·1
Mean	- -	416	266	- -	150	- -	39·2	11·1 - -	28·1	- -	1018	886	- -	132	-	13·6	0·74	83·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

44 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	379	375	375	377	378	377	378	379	375	368	367	368	371	375	378	378	380	383	383	384	384	381	381	378	377
2 q	378	377	375	377	379	380	379	378	372	366	365	366	372	376	376	376	381	379	379	380	378	381	381	381	376
3	381	381	381	381	381	381	374	378	372	365	364	365	370	372	377	381	382	386	384	385	384	383	384	387	378
4	389	383	384	383	385	387	388	387	383	374	372	371	374	387	387	386	386	390	395	395	391	376	381	369	383
5	379	359	337	365	378	379	384	382	374	365	355	348	349	357	361	366	372	376	379	381	383	384	381	381	370
6 q	380	378	378	380	382	383	387	386	379	368	360	356	360	366	371	374	378	383	384	384	383	381	382	381	377
7	381	381	381	383	385	387	387	388	386	373	366	366	372	380	383	386	383	384	382	384	387	387	387	386	382
8	386	384	385	385	386	387	387	387	383	374	371	372	381	384	391	386	386	378	432	384	342	337	365	365	380
9 d	361	351	303	357	378	377	310	294	338	300	322	334	361	368	364	361	378	357	362	356	352	367	345	338	*347*
10	348	356	342	334	374	377	355	366	367	352	344	352	359	369	372	373	374	374	377	376	375	371	381	372	364
11 d	374	374	371	384	379	355	355	355	362	346	342	345	357	367	370	378	371	364	352	352	367	378	378	374	365
12 d	365	317	350	368	381	368	379	381	373	353	349	364	366	365	370	365	369	377	379	389	374	365	369	367	367
13	367	364	370	378	371	357	374	379	373	368	366	361	359	358	365	372	365	370	383	378	377	374	365	378	370
14	374	373	370	371	378	379	382	377	374	360	348	342	352	361	362	365	369	369	362	366	377	372	374	374	368
15	377	370	366	373	378	384	379	378	381	379	373	365	372	377	381	384	394	392	387	387	390	387	386	376	380
16 d	370	373	378	380	378	381	386	380	375	368	365	356	358	366	372	380	378	373	372	368	374	381	393	357	373
17	349	350	369	372	373	378	379	375	375	364	365	361	359	377	377	378	379	381	383	383	383	383	383	383	373
18	382	381	381	378	377	381	383	383	378	374	370	368	372	377	377	377	381	385	386	385	387	383	381	381	379
19	381	381	383	386	386	385	383	382	381	379	378	378	381	379	379	381	384	386	387	386	382	379	381	379	382
20	381	382	382	379	378	379	382	382	381	374	373	373	374	378	379	381	382	383	384	384	384	382	382	379	380
21	378	379	381	382	383	386	382	382	381	377	377	377	379	384	395	386	386	385	387	387	387	390	379	373	382
22	371	373	366	378	386	387	387	386	382	378	382	373	373	374	378	382	387	387	387	387	385	384	384	383	381
23	382	382	382	383	384	385	383	382	378	374	371	372	377	382	383	384	378	370	369	376	382	384	384	383	380
24 q	381	382	381	383	386	388	390	387	383	374	370	374	376	377	378	379	381	385	384	384	383	381	384	381	381
25	386	383	383	386	387	389	389	387	385	374	374	378	379	382	379	378	377	377	378	378	370	374	379	378	380
26 q	379	379	380	381	382	382	384	385	382	377	374	374	378	382	382	383	383	386	387	387	387	383	378	380	381
27	379	379	379	382	382	386	388	387	387	383	382	382	383	386	387	390	391	393	394	391	393	393	391	391	387
28	387	384	383	385	384	387	392	391	393	388	386	386	386	389	390	391	391	391	393	387	386	378	378	382	*387*
29 d	378	377	377	381	385	387	393	391	383	373	373	377	379	374	369	377	382	382	375	373	362	363	369	374	377
30	371	377	371	373	378	382	381	378	374	370	365	367	370	374	376	380	382	383	382	381	380	379	379	379	376
Mean	376	373	371	377	381	381	379	378	377	368	*366*	366	370	375	377	379	380	380	*382*	381	379	378	379	376	376

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -3γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

45 LERWICK (D) — 11° + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	24·6	25·7	25·5	25·6	25·2	25·1	25·4	25·4	25·3	26·8	28·8	30·6	31·0	30·2	28·9	28·2	28·4	28·4	28·1	28·0	28·1	27·6	27·0	26·4	27·3
2 q	25·1	25·8	25·9	25·1	24·9	25·1	25·3	25·6	25·5	26·4	28·1	30·6	30·8	30·0	29·0	28·6	28·8	28·7	27·6	23·9	27·1	27·3	27·2	27·1	27·1
3	27·5	27·2	27·0	26·3	25·9	25·5	26·5	25·8	25·6	25·9	27·8	30·6	31·8	30·9	30·0	29·0	28·9	28·8	28·0	28·0	27·5	27·1	26·8	24·2	27·6
4	26·9	26·1	25·8	26·0	25·9	25·9	25·7	25·7	25·7	26·2	28·2	30·1	31·1	33·4	32·8	32·8	31·2	30·6	30·8	30·3	28·8	22·1	25·8	26·0	28·1
5	18·9	19·2	19·9	18·0	20·1	21·9	24·0	25·0	24·7	26·0	28·6	32·1	32·2	32·2	32·4	31·3	29·7	28·8	27·8	27·1	26·9	26·5	26·1	26·1	26·1
6 q	26·1	26·3	26·3	26·3	26·4	26·2	26·0	25·8	25·1	25·2	26·8	28·6	29·3	29·5	29·2	28·4	27·8	27·8	27·7	27·2	26·8	26·5	26·2	26·5	27·0
7	26·9	26·9	27·0	27·0	26·9	26·6	26·0	25·5	25·1	25·4	27·0	28·3	29·1	29·3	29·0	29·0	28·6	28·5	26·7	27·0	26·1	26·1	26·3	27·1	27·1
8	27·1	27·3	27·2	27·2	27·0	26·9	26·6	26·1	25·8	25·9	27·2	29·4	32·4	31·3	32·9	32·1	32·8	27·2	31·5	16·1	8·9	11·5	19·0	18·2	*25·7*
9 d	21·5	17·8	24·1	27·2	22·3	23·0	39·1	52·6	32·9	26·6	37·8	34·9	35·0	31·8	29·4	32·8	17·7	26·0	27·0	12·8	14·3	19·4	23·7	26·4	27·3
10	19·7	20·2	26·0	29·6	25·2	26·3	30·0	32·8	29·2	28·2	28·3	28·4	31·1	29·7	29·7	28·0	27·6	26·8	27·5	27·2	26·5	24·1	21·3	26·0	27·1
11 d	25·2	25·3	28·0	30·6	33·2	36·7	38·0	33·2	32·4	30·1	30·6	30·2	26·4	33·2	29·9	25·8	27·2	25·1	20·8	20·3	24·9	25·8	26·0	25·7	*28·5*
12 d	22·0	29·1	24·1	22·3	25·1	29·8	30·3	30·4	28·6	28·3	27·7	28·0	29·4	29·8	29·1	28·3	26·5	28·0	28·1	17·9	16·0	23·2	22·9	23·6	26·2
13	26·2	27·5	27·0	25·8	26·0	26·2	30·7	28·7	26·1	25·4	25·9	28·9	29·1	30·1	28·2	27·7	26·1	25·3	23·2	27·0	24·4	22·3	23·1	23·4	26·4
14	26·0	25·0	25·9	26·0	25·1	26·8	26·7	27·0	26·1	26·3	28·2	30·9	32·4	31·7	31·2	30·5	30·3	32·7	31·0	27·0	24·3	24·1	25·6	25·8	27·8
15	25·3	24·1	25·4	23·8	25·2	25·2	26·7	27·6	27·7	27·2	28·5	29·2	30·8	31·3	31·7	32·0	32·1	35·4	33·9	32·2	29·9	28·4	25·7	24·7	28·5
16 d	22·4	24·1	24·6	25·1	25·3	26·3	25·9	26·2	26·8	26·0	29·0	29·6	32·5	34·9	29·0	30·5	32·0	25·9	19·1	24·6	26·1	26·0	30·3	26·8	27·0
17	17·9	26·0	26·1	25·1	24·1	25·1	25·0	26·7	28·8	29·9	28·7	32·1	28·2	29·8	29·7	28·8	27·8	27·7	27·7	27·0	26·7	26·4	26·2	26·4	27·0
18	27·0	27·1	27·1	26·8	26·9	26·1	26·1	26·1	26·3	27·3	28·3	29·1	31·0	30·3	30·1	29·1	28·8	28·1	27·6	27·0	27·0	26·9	26·7	26·6	27·6
19	27·1	27·1	27·7	27·2	27·0	26·8	26·5	26·3	26·3	26·9	27·9	29·1	29·8	30·7	30·2	29·9	28·3	28·1	27·9	27·8	27·2	26·3	25·5	26·1	27·7
20	26·7	26·8	26·9	26·5	26·5	26·2	25·8	26·2	26·1	26·2	27·5	29·9	29·8	29·0	28·5	28·1	27·8	27·2	26·9	26·7	26·5	25·9	25·2	24·7	27·0
21	25·9	25·9	26·2	26·7	26·2	26·4	26·3	26·7	26·8	27·1	28·0	29·5	29·3	29·9	29·5	28·9	29·2	29·6	29·0	28·3	26·9	24·5	22·1	21·2	27·1
22	22·7	22·7	25·9	26·9	25·1	25·9	26·2	26·6	26·1	26·0	26·9	29·2	29·9	29·1	28·9	28·5	28·5	28·0	28·1	27·9	27·4	26·7	26·4	26·7	26·9
23	26·3	26·5	26·7	26·9	26·6	26·1	26·4	26·8	26·7	26·9	28·1	29·9	31·2	31·1	29·7	29·9	28·9	27·1	26·6	27·1	26·9	26·4	26·4	26·3	27·6
24 q	26·3	26·5	26·9	27·0	26·8	26·7	26·0	26·1	26·1	26·8	28·1	29·0	30·8	30·2	29·9	28·9	28·0	27·6	27·1	27·0	26·9	26·7	26·0	25·2	27·4
25	25·7	26·0	26·3	26·5	27·0	26·8	26·9	26·7	26·5	26·7	27·8	29·0	29·5	29·9	29·8	29·8	31·0	29·9	28·0	28·1	24·4	24·6	25·9	25·2	27·4
26 q	25·9	26·3	26·2	26·8	26·5	26·8	26·8	26·7	26·4	26·8	28·0	29·9	30·4	30·8	29·7	29·8	28·6	27·9	27·1	27·0	27·0	25·1	25·9	25·1	27·4
27	25·2	25·8	26·9	26·2	25·9	26·0	25·1	25·9	26·2	27·0	28·0	29·3	30·0	30·0	29·1	29·1	28·4	28·1	28·2	27·9	27·9	28·2	27·0	26·9	27·4
28	26·1	26·0	26·1	25·9	26·0	26·2	25·9	25·8	26·2	27·0	27·8	29·0	29·0	28·9	28·6	28·2	27·9	27·7	28·2	29·2	29·0	27·3	23·3	23·3	27·0
29 d	25·0	23·3	22·0	23·4	24·6	24·4	25·0	27·0	27·7	29·9	31·9	31·1	31·5	31·3	31·7	28·5	28·5	28·7	29·0	16·3	15·0	24·4	24·4	25·9	26·3
30	25·1	26·4	26·4	26·8	26·7	26·5	26·1	25·9	25·9	26·1	27·3	28·8	29·8	29·2	28·7	27·9	27·2	27·0	26·9	26·8	26·0	25·1	25·4	26·4	26·9
Mean	*24·8*	25·3	25·9	26·0	25·9	26·3	27·2	27·8	26·8	26·9	28·4	29·8	30·5	*30·7*	29·9	29·3	28·5	28·2	27·6	25·7	26·1	25·1	25·3	25·3	27·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

46 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	971	976	981	981	978	976	975	973	975	976	975	976	977	979	981	980	977	976	976	976	976	980	981	976	977
2 q	977	979	982	981	979	975	974	975	975	975	974	973	975	976	979	981	980	981	980	981	977	975	975	976	977
3	976	977	977	976	976	975	973	971	973	973	971	970	972	976	977	977	977	976	975	975	975	975	971	959	974
4	958	960	965	970	971	970	970	970	970	969	966	966	970	970	974	976	974	972	970	971	976	997	981	970	971
5	942	944	897	921	948	965	968	970	975	976	979	982	986	987	992	989	986	983	981	981	976	975	975	976	969
6 q	976	977	977	976	976	976	973	973	975	976	977	977	976	977	977	978	981	976	976	975	975	974	973	972	976
7	972	974	975	976	975	975	974	971	971	971	971	971	971	971	974	975	976	976	981	977	975	971	970	970	973
8	970	971	971	972	972	971	970	970	972	971	970	965	965	968	967	975	984	1034	1078	1035	954	918	942	937	975
9 d	939	931	895	858	937	953	952	902	931	983	1036	1039	1012	1007	1009	1021	1078	1057	1047	1006	958	965	955	897	974
10	887	918	937	916	940	954	970	964	970	977	978	975	976	981	986	984	986	986	982	981	981	984	974	965	965
11 d	965	965	956	921	918	934	942	954	966	988	993	999	1019	1019	1019	1023	1007	1007	1008	997	984	976	976	973	980
12 d	958	916	895	930	942	936	926	948	961	973	982	981	976	976	980	988	988	986	984	994	970	974	970	955	*962*
13	958	956	959	964	964	962	957	964	977	982	984	983	983	985	991	996	1002	1003	994	989	985	986	980	955	977
14	949	964	970	971	971	970	970	975	979	982	987	989	986	986	989	992	996	1006	1022	1010	1000	996	987	981	985
15	975	972	970	969	969	968	973	977	980	981	981	980	980	982	981	976	974	986	1026	1025	1013	1010	1002	996	*985*
16 d	989	983	975	973	975	973	971	972	974	977	977	977	980	985	990	985	987	1006	1006	998	992	977	915	881	976
17	925	935	954	969	972	971	968	969	968	971	975	981	989	983	984	981	980	977	975	975	975	976	977	979	971
18	979	980	980	977	976	972	970	970	970	971	973	975	976	978	981	982	978	975	973	972	971	974	975	976	975
19	976	977	976	975	974	972	970	969	968	967	967	970	974	977	978	978	977	976	974	974	975	975	975	977	974
20	975	977	977	977	977	975	973	970	970	970	970	970	972	974	978	980	980	979	977	974	972	972	971	972	974
21	975	976	976	976	976	975	974	972	971	971	970	965	965	968	971	976	978	980	979	976	975	970	968	966	973
22	966	968	970	959	966	971	971	971	971	971	969	968	966	970	973	976	977	977	977	976	975	974	972	970	971
23	972	972	973	973	974	975	975	974	974	971	970	969	969	969	973	976	981	989	992	986	980	977	974	972	975
24 q	971	970	970	971	970	970	970	970	971	970	970	969	970	971	973	976	976	976	977	977	976	976	971	969	972
25	964	966	968	968	969	969	970	971	972	971	968	965	965	969	971	974	977	981	985	985	991	991	980	976	974
26 q	973	972	970	970	970	970	970	970	973	971	972	971	969	967	969	970	971	972	972	973	973	975	977	976	971
27	975	973	970	969	969	966	966	967	966	965	964	964	965	965	965	965	965	966	966	970	971	973	976	974	968
28	973	972	970	968	966	965	962	964	963	964	966	966	966	966	966	968	968	968	968	972	977	982	981	976	969
29 d	975	974	971	969	965	964	962	962	964	965	964	966	971	977	983	985	981	981	991	1006	994	983	981	978	975
30	975	966	971	972	971	971	971	972	973	973	975	976	975	974	974	975	973	972	972	972	972	973	973	974	973
Mean	965	965	963	*962*	966	967	967	967	970	973	976	976	977	978	980	982	984	986	*989*	985	978	977	973	966	974

Corrections to be applied to all values: H, −6γ; D, −4·3′; V, −3γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

47 LERWICK — NOVEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 q	20 31	387	365	10 36	22	12 46	31·1	24·0	23 47	7·1	22 52	982	970	0 1	12	1,0,0,1,1,0,0,2	5	0	81·3
2 q	19 11	387	364	10 40	23	12 18	31·9	21·0	19 11	10·9	18 58	982	973	11 55	9	1,0,0,1,1,0,2,0	5	0	81·7
3	22 58	403	361	10 17	42	12 19	32·1	23·1	23 11	9·0	15 24	979	952	23 14	27	0,0,0,1,1,0,0,2	4	0	81·7
4	18 10	397	361	23 54	36	13 7	34·9	19·6	21 18	15·3	21 33	1002	954	0 33	48	1,0,0,0,2,1,2,3	9	1	81·9
5	0 8	391	326	2 29	65	13 46	34·0	12·0	3 2	22·0	14 46	994	876	2 29	118	4,3,0,1,1,1,0,0	10	1	82·0
6 q	7 1	390	352	11 27	38	13 23	30·1	24·5	9 0	*5·4*	16 15	981	971	7 5	10	0,0 0,0,1,0,0,0	1	0	82·0
7	20 54	392	361	10 50	31	13 28	30·3	23·5	20 52	6·2	19 0	982	969	23 15	13	0,0,0,0,0,1,1,1	3	0	82·2
8	18 22	447	304	21 1	143	18 27	39·7	0·6	20 53	39·1	18 36	1088	888	20 40	200	0,0,0,0,1,4,5,3	13	1	82·2
9 d	16 25	392	*214*	7 17	*178*	7 17	*60·6*	7·0	19 18	*53·6*	16 32	*1119*	*817*	3 12	*302*	5,5,5,4,3,4,4,4	34	2	81·2
10	22 37	392	305	3 12	87	7 9	34·9	16·3	0 58	18·6	14 10	987	879	0 2	108	3,3,2,2,2,0,0,2	14	1	81·0
11 d	3 18	389	339	10 8	50	6 36	40·5	7·3	18 53	33·2	15 11	1030	911	3 52	119	2,3,3,2,3,2,3,1	19	1	80·2
12 d	19 45	413	304	1 29	109	6 13	33·2	5·6	19 57	27·5	19 42	1006	865	1 56	141	4,3,3,2,1,1,4,2	20	1	80·0
13	18 28	394	352	13 19	42	6 38	33·7	18·4	18 15	15·2	17 10	1007	944	24 0	63	1,2,2,1,1,2,3,3	15	1	80·3
14	20 35	386	339	11 55	47	17 20	34·0	22·4	20 28	11·6	18 20	1028	942	0 8	86	2,1,1,1,1,2,2,2	12	1	79·6
15	17 1	404	357	11 35	47	17 48	36·6	22·5	3 51	14·2	19 2	1035	966	5 34	69	1,1,2,1,0,2,2,2	11	1	79·9
16 d	22 17	*455*	347	11 18	108	22 43	38·6	14·1	22 14	24·6	18 13	1019	965	2 40	54	2,1,1,1,2,3,3,4	17	1	80·0
17	23 10	387	337	0 54	50	11 23	33·2	15·1	0 20	18·0	12 16	992	850	2 8	142	3,1,2,2,2,0,0,0	10	1	80·0
18	20 16	390	365	11 25	25	12 27	31·8	25·1	5 56	6·7	15 21	983	969	7 3	14	0,0,0,0,0,0,0,0	0	0	79·9
19	18 55	390	376	13 25	*14*	13 52	31·9	24·6	22 33	7·3	15 22	979	966	9 57	13	0,0,0,0,1,0,0,0	1	0	80·1
20	22 40	391	369	10 59	22	11 58	30·8	23·2	23 38	7·6	16 3	981	967	10 25	14	0,0,0,0,1,0,0,1	2	0	79·0
21	21 40	398	373	12 5	25	13 24	30·7	19·5	23 42	11·2	17 3	981	963	23 13	18	0,0,0,0,1,1,0,2	4	0	79·1
22	5 42	391	360	2 40	31	2 55	30·7	21·6	0 43	9·1	17 21	978	955	3 12	23	2,2,0,0,0,0,0,0	4	0	79·3
23	14 58	388	365	18 4	23	12 47	32·1	25·2	17 51	6·9	18 8	995	967	13 15	38	0,0,0,0,1,2,1,0	4	0	80·0
24 q	6 18	393	369	10 1	24	12 35	31·1	24·3	23 20	6·8	18 40	977	965	23 3	12	0,0,0,1,0,0,0,1	2	0	80·1
25	0 5	392	360	20 48	32	16 28	32·0	20·0	20 54	12·0	21 0	1000	961	0 13	39	0,0,0,0,0,1,2,2	5	0	80·6
26 q	21 34	391	373	10 49	18	13 3	31·0	23·5	21 38	7·5	22 13	980	965	13 16	15	0,0,0,0,0,0,0,1	1	0	80·2
27	21 55	400	378	1 8	22	13 38	30·3	24·5	6 20	5·8	22 24	977	963	11 5	14	0,0,0,0,0,0,0,1	1	0	79·3
28	18 59	398	374	21 30	24	19 6	30·9	20·9	23 12	10·0	21 34	985	961	6 3	24	0,0,1,0,0,0,1,2	4	0	82·6
29 d	6 45	400	348	20 20	52	14 30	32·5	−2·7	19 51	35·2	19 49	1032	960	7 2	72	2,2,2,1,2,0,4,2	15	1	82·6
30	17 5	386	365	11 16	21	12 13	30·6	24·1	21 1	6·5	0 0	977	964	1 21	13	1,0,0,0,1,0,1,0	3	0	81·6
Mean	− −	397	349	− −	48	− −	33·9	18·4	− −	15·5	− −	1001	941	− −	61	−	8·3	0·47	80·7

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

48 LERWICK (H) — 14,000γ (0·14 C.G.S. unit) + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	381	379	378	378	383	386	386	386	382	378	376	378	382	384	384	382	383	385	385	382	382	382	382	382	382
2	382	382	382	382	382	387	388	388	386	386	389	390	390	388	385	384	385	387	390	388	387	385	372	379	385
3 q	376	379	382	382	382	382	382	382	382	381	381	382	384	382	381	382	382	383	382	384	382	382	378	376	381
4 q	374	378	380	382	383	383	383	382	382	379	379	378	380	382	383	386	387	387	388	388	387	387	386	386	383
5	385	386	387	387	388	388	387	386	383	381	382	382	381	386	386	386	391	395	400	391	377	371	366	355	384
6	374	373	377	383	390	390	390	386	382	378	376	375	371	359	354	357	367	368	367	372	373	364	367	369	373
7	379	378	372	371	383	390	387	383	379	385	378	376	377	378	381	381	381	381	380	384	387	381	364	362	379
8	362	365	372	379	375	379	405	390	386	376	371	366	369	362	363	373	379	377	374	373	379	387	382	376	376
9	378	364	378	381	383	383	387	383	370	365	369	369	369	370	374	356	366	375	379	379	377	374	377	390	375
10	379	379	379	375	383	383	386	390	385	380	377	378	377	379	379	379	379	381	382	384	384	383	381	381	381
11 q	381	386	381	381	383	387	388	389	382	376	373	372	373	373	374	376	379	379	381	382	379	380	380	380	380
12	378	379	381	382	385	387	390	386	383	378	372	369	369	377	378	382	382	383	385	382	378	377	381	378	380
13	379	378	379	382	386	389	391	389	389	385	385	381	384	373	385	395	402	404	455	467	471	292	416	303	390
14 d	293	97	204	239	284	231	201	202	244	255	260	329	374	495	492	412	356	356	352	348	347	344	348	347	*309*
15	348	347	345	348	356	361	354	363	360	357	356	352	353	369	369	366	360	364	357	359	361	357	334	352	356
16	360	353	365	362	365	369	369	368	365	362	361	361	364	368	371	374	375	374	374	378	378	374	365	365	367
17	340	327	364	380	382	383	387	386	378	360	360	363	365	360	365	360	365	370	371	366	367	369	369	372	367
18	375	369	370	372	373	374	374	373	373	374	374	374	378	372	371	374	369	365	365	367	371	375	374	374	372
19	373	373	374	373	374	374	378	378	370	377	374	370	369	369	370	369	367	381	393	387	395	391	409	396	379
20 d	366	365	350	365	357	355	361	376	375	378	382	382	382	383	386	387	387	391	424	428	367	355	351	372	376
21	339	326	296	304	364	369	369	357	357	365	362	360	365	365	371	374	375	377	378	378	378	376	379	369	361
22 q	365	369	370	370	370	371	370	370	370	370	370	373	375	379	382	382	383	385	384	386	384	383	382	377	376
23	379	374	378	378	379	381	383	383	383	382	382	382	381	382	385	389	399	392	395	402	479	482	408	383	*393*
24	365	357	363	365	370	373	378	374	376	382	382	377	363	356	372	386	385	381	378	376	376	378	378	376	374
25 d	374	374	375	378	379	382	382	382	395	383	380	370	379	391	382	382	358	400	446	410	374	339	353	362	380
26 d	332	311	329	356	369	369	371	386	378	361	359	349	359	373	376	372	368	366	373	366	374	370	378	373	363
27 d	368	357	343	365	378	367	373	382	371	370	369	362	339	365	382	380	366	366	367	400	369	365	377	377	369
28	364	367	366	374	365	378	379	386	372	373	366	355	366	361	357	343	368	373	382	375	368	381	363	354	368
29	372	370	369	364	366	382	383	378	372	374	365	361	366	365	370	379	368	373	385	379	378	367	368	369	372
30	365	374	373	369	379	386	386	384	380	370	370	372	375	371	376	377	379	377	379	375	376	379	378	375	376
31	380	379	378	382	378	386	388	383	386	382	379	373	376	374	374	381	383	385	386	387	387	390	388	383	382
Mean	367	*358*	363	367	373	374	375	375	373	371	370	370	372	377	379	378	377	379	*385*	*385*	383	375	375	371	374

379 at 0-1h. January 1, 1946.

Corrections to be applied to all values: H, -6γ; D, $-4{\cdot}3'$; V, -3γ.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

49 LERWICK (D) — 11° + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	27·1	27·2	28·0	27·2	26·4	26·0	25·9	25·8	26·0	26·8	28·0	28·9	29·3	28·9	28·8	28·3	28·1	27·5	27·4	27·3	26·7	26·3	26·0	26·1	27·3
2	26·2	26·5	26·6	27·0	27·2	26·2	26·2	26·0	26·2	27·4	28·5	29·2	29·4	29·3	29·0	28·4	28·2	28·1	27·8	27·4	27·1	27·1	25·2	16·6	26·9
3 q	24·1	25·3	25·6	25·7	25·4	25·9	26·1	26·0	26·6	27·2	28·0	29·0	29·0	28·3	28·2	27·9	28·1	27·9	26·9	27·0	26·6	25·4	25·8	24·3	26·7
4 q	25·3	26·0	26·2	26·6	26·5	26·4	26·2	26·1	26·4	26·5	27·1	28·0	28·8	28·4	27·9	27·1	27·0	26·8	26·7	26·4	26·3	26·2	26·2	26·5	26·7
5	26·8	27·1	27·3	27·3	27·4	26·6	26·0	26·1	26·6	27·2	28·1	28·8	29·0	29·7	30·0	29·4	28·9	28·6	28·2	27·6	18·2	19·4	20·6	20·7	26·5
6	23·0	23·3	27·1	26·9	25·3	25·7	25·6	26·2	26·6	28·4	28·3	29·2	31·2	34·7	32·2	29·2	29·3	27·2	27·0	26·5	19·0	17·2	24·0	23·3	26·5
7	19·4	21·6	22·3	25·4	25·1	25·7	27·5	27·7	26·3	26·3	26·7	28·6	28·4	28·0	27·5	26·9	26·4	27·2	27·1	26·9	26·2	26·0	22·4	17·1	25·5
8	19·0	23·2	25·1	26·4	28·0	32·8	25·4	27·3	27·4	27·1	28·6	29·4	29·5	29·2	23·3	27·9	27·9	27·0	26·7	27·0	25·0	23·2	24·8	22·9	26·4
9	19·6	24·1	28·2	25·3	25·3	27·0	27·0	28·0	27·1	28·7	28·3	30·2	29·0	28·0	29·8	24·9	27·0	27·7	26·2	26·0	21·3	22·6	22·3	22·1	26·2
10	24·1	25·3	25·2	28·9	27·0	27·8	27·3	27·9	27·0	27·2	26·9	27·4	28·0	28·0	27·9	28·6	27·3	27·1	26·4	25·6	25·2	25·1	25·0	25·0	26·7
11 q	26·2	26·3	25·6	26·0	25·6	26·2	26·5	26·1	25·8	26·0	26·9	27·8	28·3	28·6	28·9	28·1	27·0	27·0	26·1	25·5	25·1	24·4	25·3	25·3	26·4
12	25·4	25·9	26·0	26·1	26·2	26·0	26·0	26·1	26·2	26·5	27·2	28·2	28·8	29·9	29·1	27·9	27·5	27·0	26·4	26·9	23·6	25·8	24·5	25·2	26·6
13	25·0	25·6	26·3	26·1	26·0	26·0	26·1	26·1	26·2	26·2	26·9	27·8	29·9	32·3	32·6	32·4	37·6	40·7	38·2	34·3	25·1	9·4	14·6	7·2	27·0
14 d	15·3	1·4	-10·4	-11·4	-28·4	18·7	40·1	39·4	28·6	26·1	35·3	26·1	30·2	39·3	33·3	35·1	29·8	26·6	26·8	26·3	25·2	24·7	23·6	24·0	*21·9*
15	24·0	23·5	23·5	24·7	25·3	24·9	26·0	26·9	27·4	27·0	25·7	26·9	26·2	27·3	27·1	26·6	25·2	25·4	26·7	24·0	24·4	23·6	11·9	23·3	24·9
16	24·3	25·2	24·5	24·1	24·2	24·4	24·5	25·1	25·2	25·3	25·8	26·3	27·1	27·3	26·8	26·3	26·1	26·1	25·4	25·3	25·1	25·4	23·1	22·4	25·2
17	29·1	21·1	18·5	21·6	23·8	29·1	28·3	27·6	26·9	26·3	27·9	28·2	29·0	29·7	32·8	28·0	29·7	27·6	27·6	26·2	24·3	21·6	24·0	21·2	26·3
18	22·4	25·6	26·6	26·4	26·2	26·3	25·6	25·4	25·7	26·1	27·2	27·5	28·0	27·4	26·4	26·6	27·6	28·0	26·2	25·0	23·4	23·3	24·4	25·1	25·9
19	23·5	25·2	25·5	25·5	25·6	25·4	25·2	25·1	26·0	28·4	28·1	28·3	27·7	28·1	27·4	28·2	23·7	26·4	26·1	27·1	26·1	26·9	18·8	13·9	25·6
20 d	15·7	19·3	24·8	24·0	25·5	24·9	20·2	21·7	23·4	26·7	27·6	28·5	28·4	28·2	26·8	32·0	36·9	35·4	37·4	34·0	22·5	17·1	18·1	15·2	25·6
21	16·5	10·2	3·3	9·8	15·9	28·3	35·2	33·1	32·2	31·8	30·4	28·7	29·8	29·7	28·4	26·9	26·8	26·0	25·4	25·0	24·3	24·1	23·6	24·0	24·6
22 q	23·7	24·3	24·3	24·6	24·6	24·6	24·7	24·6	24·8	26·1	26·6	27·3	27·7	27·6	26·6	26·4	26·5	26·2	25·7	25·5	25·4	25·4	24·7	24·5	25·5
23	23·4	23·9	24·8	24·7	25·1	25·1	25·0	25·2	25·3	26·1	27·2	27·6	28·0	27·9	27·4	27·5	29·5	31·3	31·2	34·1	32·1	34·0	26·4	27·7	*27·5*
24	25·4	24·8	25·5	24·8	25·5	25·5	25·6	24·7	24·6	26·2	26·5	27·4	30·3	27·3	28·5	27·2	26·8	25·5	25·2	24·1	23·3	24·1	24·6	25·5	25·8
25 d	26·0	25·7	25·6	26·0	26·1	25·7	25·5	25·4	26·4	27·3	28·4	29·6	29·4	28·4	27·0	29·1	15·5	10·2	19·5	17·7	27·0	24·1	24·3	22·7	24·7
26 d	20·3	24·6	14·6	17·7	18·2	20·3	26·6	28·5	28·0	27·2	25·5	29·4	26·3	27·3	27·1	24·1	23·7	19·6	17·6	15·5	15·5	22·6	19·8	21·9	22·6
27 d	21·6	22·9	28·8	28·6	24·5	23·9	26·1	27·3	25·6	25·7	27·6	28·5	27·7	29·7	25·5	27·8	25·2	25·6	2·4	-3·1	23·4	23·6	22·9	23·6	23·6
28	28·8	32·7	28·0	22·7	23·9	28·2	27·3	26·3	26·8	27·3	29·7	27·9	29·4	23·3	18·9	24·5	28·2	25·8	20·9	17·4	19·8	17·4	21·6	20·9	24·9
29	25·6	26·4	26·6	24·8	31·5	25·7	26·7	26·4	25·7	26·4	25·9	25·7	26·2	27·8	27·3	27·4	26·7	24·6	23·5	22·7	25·6	16·3	21·6	23·8	25·9
30	29·3	26·3	24·8	25·6	25·3	25·5	26·9	27·8	25·8	26·4	26·4	26·8	27·3	26·6	26·4	25·6	26·5	26·6	25·8	26·6	23·6	24·5	24·7	24·7	26·1
31	25·5	24·7	24·4	24·6	27·4	26·6	26·5	26·5	27·7	27·3	28·9	28·6	28·5	30·5	28·5	27·8	27·6	27·4	25·8	26·4	25·5	25·3	25·4	25·3	26·8
Mean	23·4	23·5	23·1	23·5	23·4	25·7	26·6	26·7	26·3	26·8	27·7	28·1	28·5	*28·9*	27·9	27·8	27·5	26·8	25·7	24·8	24·1	23·1	22·7	*22·1*	25·7

25·2 at 0-1h. January 1, 1946.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

50 LERWICK (V) — 46,000γ (0·46 C.G.S. unit) + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	973	974	973	970	970	969	969	969	696	971	971	971	972	973	973	973	972	970	970	970	971	972	973	973	971
2	972	973	972	971	969	968	967	966	966	964	963	961	964	966	969	970	970	970	969	969	969	972	981	982	969
3 q	976	974	973	972	970	969	967	966	965	964	964	964	965	968	970	972	972	972	972	969	971	972	974	974	970
4 q	975	973	973	972	971	970	968	967	967	966	967	967	968	970	972	972	971	972	968	966	966	965	966	966	969
5	967	967	967	967	966	966	965	964	963	961	960	962	964	966	969	972	970	969	967	974	995	984	964	959	968
6	942	946	961	966	966	967	966	966	965	964	968	971	975	985	1004	1016	1013	1011	1006	996	985	978	966	959	977
7	938	943	952	954	956	959	959	962	965	966	966	967	969	971	973	975	977	976	975	972	970	970	977	969	965
8	967	969	968	964	963	935	927	942	949	958	962	967	974	987	1005	992	987	988	994	1001	994	977	971	970	971
9	961	958	934	953	960	966	968	968	971	976	973	971	972	981	984	1005	1001	991	984	983	983	978	969	955	973
10	957	963	966	967	962	965	966	966	967	966	968	969	969	970	973	974	976	978	976	976	974	973	971	970	969
11 q	968	962	963	963	965	966	967	968	970	970	971	971	971	971	972	975	975	975	974	975	976	975	973	970	970
12	969	967	966	966	966	966	966	967	969	969	969	969	969	969	969	971	971	971	973	974	979	976	974	973	970
13	969	968	966	965	965	966	966	966	967	966	967	966	969	971	968	967	972	1015	1085	1079	1060	996	962	987	985
14 d	1075	993	908	922	781	766	729	794	847	986	989	1021	1056	1075	1071	1064	1008	992	984	986	989	994	994	993	*959*
15	992	990	988	983	977	974	977	976	979	980	986	989	992	990	990	990	993	991	996	1001	999	996	1006	991	989
16	985	980	974	983	983	981	980	979	979	981	983	985	984	982	984	983	983	981	979	977	978	983	986	980	981
17	951	877	912	948	952	947	949	955	961	971	978	984	988	1004	1026	1047	1043	1021	1001	993	994	995	987	977	978
18	973	979	982	982	981	979	978	976	974	974	976	979	981	986	990	989	991	994	993	991	990	983	982	980	983
19	980	981	982	984	983	981	979	977	978	972	974	978	982	983	988	991	994	986	986	994	988	981	960	947	980
20 d	1010	1010	1002	993	997	992	986	982	978	970	968	971	974	980	984	985	1006	1026	1064	1111	1097	1067	1039	1015	*1009*
21	1022	994	945	912	899	919	923	943	954	957	968	979	984	991	993	989	987	986	986	985	983	981	979	984	968
22 q	984	984	985	985	984	983	982	981	979	976	975	975	975	976	979	981	982	983	982	981	981	980	979	980	981
23	979	977	976	978	979	979	979	977	976	971	970	969	970	970	973	974	973	983	988	1022	1099	1122	1103	1041	997
24	1003	992	986	987	985	983	982	982	981	976	976	978	987	1005	1007	1003	993	989	988	987	984	982	979	977	987
25 d	977	977	977	976	976	977	980	980	974	974	974	977	974	979	982	991	1076	1101	1122	1084	985	942	925	935	992
26 d	907	874	865	919	938	935	955	968	977	982	995	999	1010	1007	992	1001	1007	1022	1029	1012	987	983	974	974	971
27 d	963	965	956	930	950	960	972	980	985	991	988	990	1006	1013	1021	995	1007	1003	1019	1011	1002	995	979	950	985
28	955	925	944	945	948	935	955	968	981	984	987	990	987	1008	1040	1050	1006	999	999	993	990	975	929	955	977
29	963	974	978	975	948	950	966	975	982	983	989	991	990	990	991	989	995	992	985	984	982	991	986	977	980
30	965	963	974	976	974	976	970	971	974	977	980	980	979	984	987	984	982	982	980	985	987	983	982	981	978
31	975	967	971	970	968	965	966	971	970	970	968	971	976	982	988	985	980	977	975	975	975	976	976	978	974
Mean	974	966	963	964	960	*959*	959	964	967	972	974	977	981	986	990	991	991	992	996	*996*	993	987	980	975	977

978 at 0-1h. January 1, 1946.

Corrections to be applied to all values H, -6γ; D, $-4{\cdot}3'$; V, -3γ.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

51 LERWICK — DECEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 14,000γ +		Minimum 14,000γ +		Range	Maximum 11° +		Minimum 11° +		Range	Maximum 46,000γ +		Minimum 46,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 q	16 11	388	375	10 48	*13*	12 33	29·9	25·1	22 43	4·8	15 26	974	967	6 18	7	0,1,0,0,1,0,0,0	2	0	82·1
2	18 9	392	361	22 55	31	13 23	29·7	11·1	23 18	18·8	22 59	988	961	11 21	27	0,0,0,1,1,0,0,3	5	0	82·1
3 q	19 9	387	371	0 3	16	11 17	29·2	23·1	0 10	6·1	24 0	976	962	9 8	14	1,0,0,0,1,0,0,1	3	0	80·3
4 q	19 28	390	373	0 1	17	13 12	29·0	24·5	0 1	*4·5*	0 3	977	965	21 50	12	0,0,0,0,0,0,0,0	0	0	79·3
5	19 2	406	347	23 22	59	14 53	30·7	13·9	20 54	16·7	20 43	1002	955	23 12	47	0,0,0,1,0,0,3,3	7	1	78·7
6	5 6	392	343	14 56	49	13 20	36·0	9·1	21 5	26·9	15 43	1020	927	0 45	93	2,1,1,1,3,2,3,3	16	1	78·2
7	5 6	391	346	23 52	45	11 48	29·9	12·5	23 59	17·4	22 48	984	931	1 0	53	2,1,1,0,0,0,0,3	7	0	77·3
8	6 47	412	343	13 50	69	5 35	36·2	12·6	0 0	23·6	14 29	1014	916	6 1	98	3,3,2,1,3,1,1,2	16	1	78·0
9	23 24	401	343	15 21	58	1 56	34·4	15·1	0 54	19·3	15 43	1013	929	2 22	84	3,2,1,2,2,3,2,2	17	1	78·1
10	7 30	392	370	3 42	22	3 50	32·1	24·1	0 38	8·0	17 10	978	954	0 1	24	1,2,0,1,1,1,0,0	6	0	78·5
11 q	7 8	390	369	12 0	21	14 40	29·2	23·1	21 8	6·1	20 53	977	959	1 43	18	2,0,0,1,1,0,1,1	6	0	78·1
12	6 5	391	363	12 41	28	13 51	30·4	20·5	20 18	9·9	20 26	983	965	6 5	18	0,0,0,0,1,0,2,0	3	0	76·9
13	20 18	625	215	21 20	410	20 24	48·4	0·8	21 12	47·6	18 35	1114	867	22 43	247	0,0,0,0,3,3,5,6	17	1	76·6
14 d	14 4	*778*	*-61*	1 52	*839*	6 34	55·6	*-40·1*	1 40	*95·7*	15 3	1136	*657*	7 0	*479*	7,7,6,5,7,4,1,1	38	2	76·2
15	15 17	375	322	22 43	53	8 26	28·5	3·7	22 25	24·8	22 0	1011	972	5 53	39	0,2,2,2,2,2,2,4	16	1	76·3
16	19 48	389	344	1 37	45	13 11	27·5	21·2	23 0	6·3	0 23	989	969	2 18	20	2,0,0,1,0,0,0,2	5	0	76·1
17	6 52	392	314	11 20	78	0 37	23·4	16·1	2 47	7·3	15 54	1052	866	1 38	186	4,3,1,2,2,2,2,2	18	1	75·8
18	0 6	386	361	19 2	25	17 15	29·0	20·4	0 4	8·6	18 56	995	970	0 8	25	2,0,0,2,2,1,2,2	11	0	75·7
19	22 57	657	312	23 21	345	23 18	44·7	-3·7	23 38	48·4	22 58	1025	851	23 9	174	1,0,1,2,1,2,3,6	16	1	76·8
20 d	19 8	457	306	6 2	151	19 2	51·0	7·7	21 11	43·3	19 22	1132	965	10 16	167	3,3,3,2,2,3,5,4	25	1	77·8
21	4 12	387	206	3 2	181	6 14	36·9	0·5	2 41	36·4	0 16	1037	875	3 56	162	5,5,2,3,2,0,0,2	19	1	77·9
22 q	20 14	388	361	0 28	27	12 10	28·2	22·9	0 35	5·3	3 20	987	974	12 13	13	1,0,0,0,0,0,0,0	1	0	77·5
23	21 40	556	368	1 12	188	20 36	*55·9*	17·1	20 22	38·8	21 47	*1176*	969	16 40	207	2,0,0,1,0,3,5,5	16	1	77·3
24	15 12	399	345	13 33	54	15 0	31·6	22·4	3 2	9·2	0 1	1016	972	11 7	44	2,2,2,2,2,3,1,1	15	1	77·7
25 d	18 32	545	313	21 50	232	20 34	36·1	-7·2	16 50	43·3	18 31	1161	907	22 24	254	0,0,2,2,3,5,5,4	21	1	77·3
26 d	14 59	395	277	1 55	118	1 33	38·4	8·7	1 11	29·7	18 23	1031	823	1 59	208	4,3,2,2,3,3,3,2	22	1	77·2
27 d	19 12	422	325	2 21	97	13 55	36·6	-21·1	19 6	57·7	14 6	1054	922	3 10	132	3,3,2,2,3,3,5,3	24	1	77·4
28	21 53	431	320	15 7	111	1 10	40·3	5·4	21 48	34·9	15 31	1060	912	1 21	148	4,3,3,2,3,3,3,4	25	1	77·8
29	18 34	396	353	4 10	43	4 32	33·7	10·5	21 29	23·2	16 28	999	933	4 56	66	2,3,2,2,2,2,3,3	19	1	77·8
30	6 2	392	356	0 8	36	0 38	31·6	21·7	20 38	9·9	20 48	989	952	0 55	37	2,2,1,1,1,1,2,0	10	0	77·4
31	21 56	395	367	14 3	28	13 26	31·4	23·3	2 3	8·1	14 27	990	963	5 24	27	2,1,1,1,1,1,0,1	8	0	77·1
Mean	- -	435	323	- -	113	- -	35·0	11·1	- -	23·9	- -	1027	926	- -	101	-	13·4	0·61	77·8

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

52 LERWICK 1945

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	*-11·9*	-7·1	-9·8	-6·3	-4·2	+4·5	+5·8	+3·7	+2·5	-0·1	-4·0	-3·3	-1·2	+2·9	+3·8	+5·8	+8·7	+5·3	*+11·2*	+2·5	+0·1	-0·1	-1·3	-7·5
Feb.	-1·6	-2·3	-1·8	-0·2	+1·6	+5·6	+7·7	+7·4	+3·0	-7·8	*-10·2*	-9·7	-8·1	-4·7	-0·6	+1·9	+0·8	+3·6	+4·3	+3·5	+2·3	+1·8	+1·2	+2·3
Mar.	-5·5	-10·5	-13·7	-4·2	+4·2	+5·6	+7·5	+2·2	-4·4	-14·2	-18·6	*-20·4*	-11·2	-2·1	+8·4	+17·3	+15·1	*+22·0*	+19·1	+11·4	+0·1	-2·7	-5·3	-0·1
Apr.	+1·2	-7·4	-6·7	-2·3	+2·8	+4·1	+1·7	-5·0	-11·9	-21·7	*-23·7*	-23·6	-15·6	-3·4	+5·7	+8·7	+12·7	*+19·1*	+18·5	+17·7	+12·7	+4·7	+5·3	+6·3
May	+1·5	-0·3	-1·4	-1·2	-0·7	-1·2	-6·9	-11·5	-19·1	-27·0	*-30·2*	-27·7	-18·7	-9·7	+1·9	+10·0	+20·8	*+29·0*	+28·7	+25·5	+18·4	+11·6	+5·8	+2·4
June	+1·5	-2·5	-2·7	-3·0	-0·1	-1·0	-5·6	-9·7	-15·7	-24·7	*-28·5*	-27·5	-19·8	-10·2	-2·8	+7·9	+14·0	+20·7	+27·6	*+28·2*	+23·0	+15·5	+9·4	+5·9
July	-3·2	-1·4	-0·2	+0·5	-1·3	-0·6	-5·7	-13·7	-20·5	-29·7	*-30·0*	-29·0	-22·8	-10·5	+1·1	+11·6	+20·1	+25·8	+27·1	*+27·4*	+24·2	+16·6	+9·8	+4·2
Aug.	+6·1	-1·2	-3·0	-10·4	-0·9	+1·8	-2·3	-9·4	-19·0	-29·8	*-31·5*	-27·4	-17·8	-6·2	+1·8	+10·6	+17·9	+20·2	*+23·9*	+20·5	+18·1	+13·7	+13·8	+10·6
Sept.	-2·0	-2·1	+0·9	+3·3	+5·5	+4·9	+4·0	-3·6	-13·1	-22·7	*-26·6*	-25·2	-16·6	-6·3	+4·4	+10·4	*+17·4*	+17·0	+13·1	+12·8	+10·9	+3·7	+4·5	+5·4
Oct.	-18·2	-11·8	-4·3	+2·8	+9·4	+12·2	+10·7	+6·1	-3·1	-14·9	*-19·8*	-18·8	-13·9	-0·4	+8·3	+9·6	+8·9	+13·4	+12·7	*+15·4*	+12·6	+4·7	-7·6	-14·0
Nov.	-0·4	-3·3	-4·7	+0·7	+4·5	+4·6	+3·1	+2·3	+0·8	-8·2	*-10·6*	-10·4	-6·2	-1·3	+0·4	+2·5	+4·1	+4·2	*+6·1*	+4·5	+2·8	+1·9	+2·6	+0·2
Dec.	-7·3	*-15·9*	-11·3	-6·4	-0·4	+0·5	+1·6	+1·4	-0·6	-2·7	-4·3	-4·1	-1·8	+3·3	+5·4	+3·8	+2·8	+5·5	*+11·3*	+10·8	+9·1	+1·0	+1·4	-3·1
Year	-3·3	-5·5	-4·9	-2·2	+1·7	+3·4	+1·8	-2·5	-8·4	-17·0	*-19·8*	-18·9	-12·8	-4·1	+3·1	+8·3	+11·9	+15·5	*+17·0*	+15·0	+11·2	+6·0	+3·3	+1·1
Winter	-5·3	-7·1	-6·9	-3·1	+0·4	+3·8	+4·5	+3·7	+1·4	-4·7	*-7·3*	-6·9	-4·3	+0·1	+2·3	+3·5	+4·1	+4·7	*+8·2*	+5·3	+3·6	+1·1	+1·0	-2·0
Equinox	-6·1	-8·0	-6·0	-0·1	+5·5	+6·6	+6·0	-0·1	-8·1	-18·4	*-22·2*	-22·0	-14·3	-3·1	+6·7	+11·5	+13·5	*+17·9*	+15·8	+14·3	+9·1	+2·6	-0·8	-0·6
Summer	+1·5	-1·3	-1·8	-3·5	-0·7	-0·3	-5·1	-11·1	-18·6	-27·8	*-30·1*	-27·9	-19·8	-9·1	+0·5	+10·0	+18·2	+23·9	*+26·8*	+25·4	+20·9	+14·3	+9·7	+5·8

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-2·33	-1·71	-2·17	-1·85	-1·45	-0·46	+0·25	+0·87	+0·73	+1·22	+1·69	+2·59	*+3·42*	+2·98	+2·48	+1·91	+1·50	+0·48	+1·02	-1·13	-1·98	*-2·89*	-2·75	-2·42
Feb.	-2·28	-1·77	-1·46	-1·21	-0·91	-0·40	-0·31	-0·44	-0·41	-0·25	+0·93	+2·64	+3·79	+4·88	*+4·93*	+3·10	+1·87	+1·16	-0·95	-0·94	-3·15	-2·94	*-3·24*	-2·64
Mar.	-1·37	-2·78	-2·74	-1·80	-1·85	-1·57	-1·53	-1·55	-1·98	-0·73	+1·40	+4·47	+6·37	*+6·90*	+5·84	+4·59	+3·20	+0·65	-1·88	-2·23	-2·93	*-3·65*	-2·55	-2·28
Apr.	-1·35	-0·33	-0·68	-2·13	-3·46	-3·43	-3·49	*-3·76*	-3·46	-1·89	+0·69	+3·79	+6·49	*+6·62*	+5·81	+4·44	+2·31	+0·57	-0·09	-0·08	-1·23	-1·39	-2·31	-1·60
May	-0·97	-2·04	-3·19	-3·17	-3·74	-4·43	*-4·86*	-4·76	-3·83	-1·74	+1·01	+3·93	+6·23	*+6·86*	+6·69	+5·38	+3·60	+2·23	+1·38	+0·62	-0·49	-1·86	-1·66	-1·19
June	-0·82	-1·41	-1·60	-2·15	-3·90	-5·24	-5·78	*-6·18*	-5·46	-3·03	-0·63	+2·47	+4·67	*+5·79*	+5·65	+5·01	+3·93	+3·04	+2·34	+1·68	+0·88	+0·49	+0·23	+0·08
July	-1·17	-2·45	-2·87	-4·05	-4·30	-5·30	*-5·68*	-5·63	-4·75	-2·48	-0·07	+3·26	+5·87	*+7·01*	+6·50	+5·06	+4·06	+2·94	+2·19	+2·24	+1·31	+0·54	-1·32	-0·91
Aug.	-1·76	-2·21	-2·67	-3·84	-3·73	-4·95	*-5·42*	-4·96	-3·92	-1·45	+1·30	+4·27	+6·62	*+7·31*	+6·10	+4·55	+2·70	+1·48	+0·72	+0·67	+0·08	+0·92	-0·29	-1·52
Sept.	-2·66	-1·47	-1·79	-1·81	-1·92	-2·58	-3·33	*-3·52*	-2·94	-1·49	+0·97	+4·03	+5·87	*+6·29*	+6·25	+4·80	+2·71	+1·54	+0·34	-0·17	-1·22	-1·81	-2·63	-3·46
Oct.	-3·42	*-4·29*	-3·07	-2·74	-1·52	-1·54	-1·48	-1·86	-2·19	-0·52	+2·46	+5·18	*+6·86*	+6·78	+6·28	+4·80	+2·65	+1·48	+0·24	-0·23	-2·65	-3·64	-3·47	-4·11
Nov.	*-2·37*	-1·85	-1·28	-1·16	-1·33	-0·85	+0·05	+0·58	-0·36	-0·30	+1·25	+2·66	+3·31	*+3·47*	+2·70	+2·17	+1·31	+1·05	+0·39	-1·49	-2·13	-2·10	-1·87	-1·85
Dec.	-2·15	-2·03	-2·42	-2·08	-2·15	+0·07	+0·95	+1·11	+0·72	+1·19	+2·00	+2·38	+2·82	*+3·18*	+2·23	+2·12	+1·81	+1·16	+0·10	-0·78	-1·50	-2·46	-2·84	*-3·43*
Year	-1·89	-2·03	-2·16	-2·33	-2·52	*-2·57*	-2·55	-2·51	-2·32	-0·96	+1·08	+3·47	+5·19	*+5·67*	+5·12	+3·99	+2·64	+1·48	+0·48	-0·15	-1·25	-1·73	-2·06	-2·11
Winter	-2·28	-1·84	-1·83	-1·57	-1·46	-0·41	+0·23	+0·53	+0·17	+0·47	+1·47	+2·57	+3·33	*+3·63*	+3·09	+2·33	+1·62	+0·96	+0·14	-1·08	-2·19	-2·59	*-2·67*	-2·59
Equinox	-2·20	-2·22	-2·07	-2·12	-2·19	-2·28	-2·46	-2·67	-2·64	-1·16	+1·38	+4·37	+6·39	*+6·65*	+6·05	+4·66	+2·72	+1·06	-0·35	-0·68	-2·01	-2·62	-2·74	*-2·86*
Summer	-1·18	-2·03	-2·58	-3·30	-3·92	-4·98	*-5·43*	-5·38	-4·49	-2·17	+0·40	+3·48	+5·85	*+6·74*	+6·23	+5·00	+3·57	+2·42	+1·66	+1·30	+0·45	+0·02	-0·76	-0·89

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-11·9	*-13·7*	-11·5	-10·4	-8·6	-7·2	-6·2	-5·4	-3·5	-2·5	-0·6	+0·2	+1·0	+2·5	+5·4	+9·0	+12·3	+12·1	+14·4	*+17·1*	+12·5	+5·8	-1·9	-8·9
Feb.	*-20·5*	-19·2	-14·2	-9·5	-6·7	-8·0	-8·1	-6·0	-3·1	+0·4	+0·8	0·0	+0·4	+1·7	+6·1	+13·7	*+17·6*	+15·8	+13·0	+14·1	+11·7	+7·4	+1·9	-9·3
Mar.	*-37·8*	-34·7	-24·8	-16·6	-10·2	-8·2	-5·8	-2·4	+0·2	+1·6	+3·0	+3·2	+3·0	+7·8	+17·6	+28·3	+35·0	*+40·1*	+39·3	+20·7	+2·5	-6·7	-22·6	-32·5
Apr.	-23·8	*-26·5*	-25·9	-20·0	-9·5	-5·9	-3·9	-1·8	-0·8	-0·2	+2·0	+0·3	+5·4	+11·4	+16·1	+20·9	+22·5	*+24·0*	+23·9	+18·7	+8·7	-4·6	-14·7	-16·2
May	-13·3	*-16·1*	-13·6	-10·9	-8·1	-6·1	-3·5	-2·8	-2·7	-3·8	-6·0	-7·5	-7·6	-2·1	+4·1	+12·2	+19·1	*+21·4*	+21·1	+19·1	+13·2	+5·2	-3·7	-7·6
June	-7·1	-8·7	-7·8	-8·8	*-10·3*	-6·5	-3·3	-1·8	-1·7	-3·2	-3·9	-6·1	-5·1	-2·5	+1·7	+5·9	+11·6	*+13·5*	+13·0	+12·4	+10·4	+7·6	+2·7	-1·9
July	*-18·6*	-17·9	-16·5	-14·3	-10·9	-9·5	-8·0	-3·8	-1·9	+0·1	+1·5	-0·3	0·0	+2·0	+5·2	+9·4	+14·0	*+19·1*	*+19·1*	+15·6	+13·7	+7·7	+0·5	-6·2
Aug.	-11·2	-14·6	-18·6	*-22·9*	-11·8	-3·3	+1·1	+2·5	+2·1	+0·5	-2·8	-5·3	-5·9	-2·3	+4·6	+10·7	+16·5	*+19·0*	+18·5	+14·7	+10·6	+5·6	-1·4	-6·3
Sept.	-17·2	*-22·3*	-17·0	-12·8	-8·4	-3·5	-0·5	+2·3	+2·4	+1·9	+1·2	-0·1	-0·9	+2·3	+7·6	+13·7	+18·3	+18·6	*+18·8*	+17·5	+9·8	-5·7	-11·7	-14·4
Oct.	-26·5	-25·1	-17·0	-13·8	-9·1	-5·3	-2·1	+0·1	+2·0	+1·8	+0·3	+2·2	+3·5	+7·9	+15·0	+18·7	+21·7	*+24·4*	+23·1	+19·9	+9·9	-2·9	-19·4	*-29·3*
Nov.	-9·2	-9·0	-11·2	*-12·1*	-7·5	-6·4	-6·7	-7·0	-3·9	-0·3	+2·1	+2·2	+2·8	+4·1	+6·4	+8·2	+10·1	+12·3	*+15·1*	+11·6	+4·3	+3·1	-1·1	-7·9
Dec.	-3·3	-11·5	-14·8	-12·7	-17·6	*-18·8*	-18·3	-13·7	-10·1	-5·2	-3·3	-0·4	+3·2	+8·3	+12·6	+13·8	+14·1	+15·2	+18·5	*+18·8*	+15·7	+9·7	+2·2	-2·4
Year	-16·7	*-18·3*	-16·1	-13·7	-9·9	-7·4	-5·4	-3·3	-1·7	-0·7	-0·5	-0·9	0·0	+3·4	+8·5	+13·7	+17·7	+19·6	*+19·8*	+16·7	+10·3	+2·7	-5·8	-11·9
Winter	-11·2	*-13·3*	-12·9	-11·2	-10·1	-10·1	-9·8	-8·0	-5·1	-1·9	-0·3	+0·5	+1·9	+4·1	+7·6	+11·2	+13·5	+13·9	+15·3	*+15·4*	+11·1	+6·5	+0·3	-7·1
Equinox	-26·3	*-27·1*	-21·2	-15·8	-9·3	-5·7	-3·1	-0·5	+0·9	+1·3	+1·6	+1·4	+2·7	+7·3	+14·1	+20·4	+24·4	*+26·8*	+26·3	+19·2	+7·7	-4·9	-17·1	-23·1
Summer	-12·5	*-14·3*	-14·1	-14·2	-10·3	-6·3	-3·4	-1·5	-1·1	-1·6	-2·8	-4·8	-4·7	-1·2	+3·9	+9·5	+15·3	*+18·3*	+17·9	+15·5	+12·0	+6·5	-0·5	-5·5

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

53 LERWICK 1945

HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·6	−2·8	−2·0	−1·2	−0·2	+1·5	+1·6	+1·2	−1·8	−4·8	*−5·0*	−4·6	−2·4	+0·6	+2·4	+2·2	+3·6	*+4·5*	+4·4	+3·6	+2·0	−0·2	−1·2	+0·2
Feb.	−1·1	−1·6	−1·7	−1·0	+1·0	+2·7	+5·4	*+6·8*	+4·3	−2·6	−8·3	*−9·8*	−8·3	−5·6	−2·1	+1·2	+1·0	+2·9	+4·0	+5·2	+3·1	+1·0	+1·9	+1·6
Mar.	+4·7	+2·9	+1·4	+2·9	+5·9	+4·9	+4·7	+1·3	−6·8	−19·1	*−24·7*	−24·1	−17·3	−11·1	−2·6	+2·3	+5·1	+6·5	+10·3	*+11·3*	+10·8	*+11·3*	+9·7	+9·7
Apr.	+6·6	+5·3	+2·0	+2·3	+1·9	+2·0	+1·3	−4·1	−12·4	−22·5	*−26·6*	−26·3	−19·2	−9·3	0·0	+1·3	+7·3	+11·8	+12·5	+13·3	+12·4	*+13·7*	+13·6	+13·1
May	+1·8	+1·5	+0·2	+0·5	+3·3	+1·8	−3·5	−8·7	−15·6	−20·3	*−24·8*	−21·3	−16·8	−8·3	+3·8	+1·9	+10·5	+17·8	*+19·1*	+17·9	+14·2	+12·1	+8·4	+4·5
June	+4·7	+2·5	+2·1	+0·1	+2·1	+1·7	−4·5	−9·5	−15·9	−24·5	*−28·9*	−26·9	−20·1	−9·3	−2·5	−0·3	+8·5	+16·1	+23·1	*+23·5*	+21·5	+15·7	+11·9	+8·9
July	+6·2	+4·3	+5·6	+6·6	+6·2	+3·1	−1·8	−8·8	−16·2	−26·7	−32·0	*−32·2*	−25·6	−16·9	−5·4	+4·2	+11·4	+16·3	+19·4	*+24·0*	+22·4	+14·1	+11·6	+10·2
Aug.	+5·8	+3·9	+4·6	+3·3	+3·9	+3·2	−1·7	−8·3	−17·2	−29·7	*−34·6*	−32·1	−23·4	−12·5	−1·2	+8·3	+14·5	+18·6	*+19·5*	+18·1	+16·6	+14·5	+13·8	+12·1
Sept.	+6·7	+4·7	+4·5	+6·5	+6·3	+7·0	+5·3	−1·5	−11·1	−23·3	*−27·7*	−26·9	−20·7	−10·9	−4·5	+1·1	+2·5	+7·4	+12·1	+13·1	+12·5	+11·3	+12·3	*+13·3*
Oct.	+4·7	+4·2	+2·7	+5·4	+6·4	+6·7	+6·4	+1·6	−7·3	−21·0	*−26·5*	−25·2	−20·5	−12·4	−2·3	+3·6	+5·0	+9·5	+10·4	+10·6	*+10·7*	+9·6	+9·1	+8·6
Nov.	+0·8	−0·5	−0·8	+1·0	+2·8	+3·3	+5·0	+4·4	−0·4	−8·1	*−11·4*	−11·0	−7·2	−3·5	−1·6	−0·6	+2·0	+4·5	+4·8	*+5·2*	+4·4	+2·7	+2·6	+1·6
Dec.	*−5·0*	−2·1	−2·2	−1·7	−0·2	+1·5	+1·4	+1·5	−0·8	−3·5	−4·6	−3·7	−1·6	−0·3	+0·4	+1·3	+2·4	+3·5	+3·6	*+4·1*	+2·4	+2·5	+1·2	−0·1
Year	+2·9	+1·9	+1·4	+2·1	+3·3	+3·3	+1·6	−2·0	−8·4	−17·2	*−21·3*	−20·3	−15·3	−8·3	−1·3	+2·2	+6·1	+9·9	+11·9	*+12·5*	+11·1	+9·0	+7·9	+7·0
Winter	−1·7	−1·7	−1·7	−0·7	+0·9	+2·3	+3·3	+3·5	+0·3	−4·7	*−7·3*	−7·3	−4·9	−2·2	−0·2	+1·0	+2·3	+3·9	*+4·2*	+4·2	+3·0	+1·5	+1·1	+0·8
Equinox	+5·7	+4·3	+2·7	+4·3	+5·1	+5·1	+4·4	−0·7	−9·4	−21·5	*−26·4*	−25·6	−19·4	−10·9	−2·3	+2·1	+5·0	+8·8	+11·3	*+12·1*	+11·6	+11·5	+11·2	+11·2
Summer	+4·6	+3·1	+3·1	+2·6	+3·9	+2·5	−2·9	−8·8	−16·2	−25·3	*−30·1*	−28·1	−21·5	−11·7	−1·3	+3·5	+11·2	+17·2	+20·3	*+20·9*	+18·7	+14·1	+11·4	+8·9

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	−0·68	−0·72	−0·84	−0·78	−0·72	−1·20	−1·08	−1·02	−0·84	−0·26	+0·84	+1·80	*+2·64*	+2·54	+1·44	+0·86	+0·74	+0·88	+0·60	−0·16	−0·62	−1·34	*−1·50*	−0·58
Feb.	*−2·44*	−1·30	−0·72	−0·52	−0·62	−0·74	−0·86	−1·24	−1·40	−1·56	−0·22	+1·58	+2·92	+4·12	*+4·16*	+3·02	+1·50	+0·72	+0·34	+0·10	−0·36	−1·90	*−2·44*	−2·14
Mar.	−0·59	−0·60	−0·36	−0·91	−1·56	−1·78	−2·85	*−3·62*	−3·50	−1·41	+0·68	+3·24	+5·29	*+5·36*	+4·58	+2·51	+0·92	+0·06	+0·25	+0·16	−0·62	−0·79	−1·70	−2·76
Apr.	+0·84	−0·27	+0·49	−0·12	−2·61	−3·33	−4·12	*−4·65*	−4·63	−3·12	−0·67	+2·13	+4·94	*+5·55*	+4·47	+2·92	+1·35	+0·27	−0·22	−0·13	+0·13	+0·22	+0·29	+0·27
May	−0·81	−1·53	−1·77	−2·41	−3·43	*−4·29*	−4·25	−4·05	−3·31	−1·45	+0·63	+3·31	+5·43	*+5·51*	+4·93	+3·57	+2·43	+1·47	+0·75	+0·11	+0·57	+0·31	−0·95	−0·77
June	−0·23	−1·32	−2·06	−2·09	−3·40	−4·38	−5·07	*−5·20*	−5·04	−2·71	−0·56	+2·12	+3·97	*+4·62*	*+4·62*	+3·65	+2·68	+2·26	+1·87	+1·74	+1·74	+1·63	+0·90	+0·26
July	−0·36	−1·41	−2·14	−3·05	−4·46	−5·99	*−6·46*	−5·57	−5·12	−3·01	−0·18	+3·03	+5·86	*+6·95*	+6·28	+5·19	+3·84	+2·31	+1·76	+1·33	+0·08	+0·39	+0·52	+0·21
Aug.	−0·98	−1·65	−2·03	−2·08	−2·77	−4·15	−4·76	*−4·93*	−4·23	−2·52	+0·07	+3·29	+5·92	*+6·63*	+5·59	+3·82	+2·11	+1·19	+0·70	+0·57	+0·67	+0·24	−0·13	−0·57
Sept.	−2·17	−0·61	−0·25	−1·39	−1·83	−2·68	−3·51	*−3·87*	−3·39	−1·77	+0·17	+3·05	+5·45	*+5·87*	+4·77	+3·33	+2·13	+1·32	+0·47	+0·03	+0·99	+0·77	−1·25	−2·11
Oct.	−1·85	−1·84	−1·55	−1·52	−1·37	−1·58	−2·25	−3·22	*−4·01*	−2·80	−0·09	+3·04	+4·65	*+4·92*	+4·13	+2·86	+1·75	+1·28	+0·97	+0·52	+0·19	−0·56	−0·61	−1·06
Nov.	*−1·61*	−1·10	−1·05	−1·06	−1·26	−1·23	−1·32	−1·30	−1·53	−0·82	+0·75	+2·52	*+3·25*	+2·92	+2·13	+1·56	+1·10	+0·87	+0·30	−0·60	−0·03	−0·58	−0·75	−1·16
Dec.	*−1·25*	−0·70	−0·59	−0·50	−0·82	−0·71	−0·64	−0·80	−0·61	0·00	+0·79	+1·68	*+2·09*	+1·84	+1·55	+1·04	+0·82	+0·55	+0·04	−0·18	−0·51	−0·98	−0·93	−1·18
Year	−1·01	−1·09	−1·07	−1·37	−2·07	−2·67	−3·09	*−3·29*	−3·13	−1·79	+0·18	+2·57	+4·37	*+4·74*	+4·05	+2·86	+1·78	+1·10	+0·65	+0·29	+0·02	−0·34	−0·71	−0·97
Winter	*−1·49*	−0·95	−0·80	−0·71	−0·85	−0·97	−0·97	−1·09	−1·09	−0·66	+0·54	+1·89	+2·73	*+2·85*	+2·32	+1·62	+1·04	+0·75	+0·32	−0·21	−0·38	−1·20	−1·41	−1·27
Equinox	−0·94	−0·83	−0·42	−0·99	−1·84	−2·34	−3·18	−3·84	*−3·88*	−2·28	+0·02	+2·86	+5·08	*+5·42*	+4·49	+2·91	+1·54	+0·73	+0·37	+0·15	−0·32	−0·47	−0·82	−1·41
Summer	−0·59	−1·48	−2·00	−2·41	−3·51	−4·70	*−5·13*	−4·94	−4·43	−2·42	−0·01	+2·94	+5·29	*+5·93*	+5·35	+4·06	+2·77	+1·81	+1·27	+0·94	+0·77	+0·64	+0·09	−0·22

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+0·5	+0·9	+0·4	−1·1	−2·1	−3·3	−2·7	−2·3	−2·0	−0·7	−0·3	+0·7	+1·3	+2·1	+2·2	+1·5	+0·7	+0·3	+0·1	−0·1	+0·2	*+2·5*	+2·1	−0·9
Feb.	*−8·6*	−5·1	−4·3	−2·8	−2·5	−2·5	−1·8	−1·5	−0·9	+0·4	+0·1	−1·7	−2·8	−2·9	−1·3	+1·4	+5·5	+6·7	+5·6	+4·5	+4·9	+6·2	+3·7	−0·3
Mar.	−3·9	−1·3	−0·3	−1·7	−0·9	+1·1	+1·3	+2·7	+2·9	+1·7	−1·1	−4·1	−4·9	−1·9	+1·7	+4·9	*+6·3*	+5·7	+3·7	+2·7	+3·3	−0·5	−5·7	*−11·7*
Apr.	−7·9	−5·0	−2·5	−3·6	−0·3	+3·0	+2·1	+2·6	+1·3	−0·6	−3·3	−7·2	*−8·9*	−4·0	+0·5	+4·8	+6·1	*+7·2*	+6·7	+5·0	+2·9	+1·4	+0·1	−0·4
May	*−9·9*	−4·8	−1·7	−1·1	−0·9	−0·2	+1·7	+0·3	−0·7	−3·4	−4·7	−6·9	−7·9	−4·4	+1·1	+5·5	+6·3	+6·2	+6·5	*+7·1*	+6·5	+4·8	+1·9	−1·3
June	0·0	+1·0	+2·0	+1·8	−2·6	−1·7	+1·4	+1·0	−0·4	−2·2	−5·2	−7·8	*−10·0*	*−10·0*	−5·2	−0·2	+1·8	+3·7	+6·4	*+7·6*	+7·4	+5·6	+3·0	+2·6
July	−1·3	+1·8	+3·1	+5·6	+5·2	*+5·9*	+5·0	+1·8	−0·9	−4·8	−6·7	*−8·6*	−8·3	−7·8	−8·1	−4·6	+0·8	+5·3	+4·6	+2·8	+3·5	+4·4	+1·3	0·0
Aug.	−0·5	+1·5	+2·9	+3·9	+3·7	+3·0	+3·5	+4·1	+3·1	−1·9	−5·7	−10·5	*−10·9*	−8·7	−5·3	−1·3	+2·5	+3·6	+4·7	*+5·1*	+2·3	+0·5	+0·5	−0·1
Sept.	−1·4	−1·7	−1·7	−0·6	+1·5	+3·3	+3·8	*+5·1*	+4·7	+2·8	−1·1	−6·1	*−9·8*	−9·1	−5·5	−1·4	+2·1	+3·1	+4·4	+4·5	+4·3	+3·4	−0·9	−3·7
Oct.	−1·7	*−3·7*	−2·1	−2·7	−0·7	+0·1	+1·9	+4·3	*+6·1*	+4·3	+1·9	−0·3	−2·1	−2·3	−2·1	+0·9	+1·5	+0·7	+0·3	−0·3	−0·9	−0·9	−1·1	−1·1
Nov.	−1·2	+0·1	+1·3	+1·0	−0·1	−1·3	−2·4	*−2·5*	−0·9	−1·2	−1·1	−1·5	−1·4	−0·7	+1·1	+2·2	*+2·3*	+1·5	+1·4	+1·7	+0·7	+1·2	+0·7	−0·9
Dec.	*+3·0*	+1·2	+1·3	+0·2	−0·2	−0·8	−1·6	−2·0	−2·1	*−2·8*	−2·6	−2·6	−2·0	−0·6	+1·1	+2·4	+2·2	+2·2	+1·0	0·0	+0·9	+0·6	+0·8	+0·4
Year	−2·7	−1·2	−0·1	−0·1	0·0	+0·5	+1·0	+1·1	+0·9	−0·7	−2·5	−4·7	*−5·6*	−4·2	−1·6	+1·3	+3·2	*+3·9*	+3·8	+3·4	+3·0	+2·4	+0·5	−1·5
Winter	−1·6	−0·7	−0·3	−0·7	−1·2	−2·0	*−2·1*	*−2·1*	−1·5	−1·1	−1·0	−1·3	−1·2	−0·5	+0·8	+1·9	+2·7	+2·7	+2·0	+1·5	+1·7	+2·6	+1·8	−0·4
Equinox	−3·7	−2·9	−1·7	−2·1	−0·1	+1·9	+2·3	+3·7	+3·7	+2·1	−0·9	−4·4	*−6·4*	−4·3	−1·3	+2·3	+4·0	*+4·2*	+3·8	+3·0	+2·4	+0·9	−1·9	−4·2
Summer	−2·9	−0·1	+1·6	+2·5	+1·3	+1·7	+2·9	+1·8	+0·3	−3·1	−5·6	−8·5	*−9·3*	−7·7	−4·4	−0·1	+2·9	+4·7	+5·5	*+5·6*	+4·9	+3·8	+1·7	+0·3

DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non cyclic change)

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HORIZONTAL FORCE

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	*-49·2*	-26·2	-26·3	-29·6	-29·6	+9·8	+10·8	0·0	-0·7	+2·0	-6·2	-3·8	-1·2	+10·6	+11·9	+26·2	+41·8	+19·0	*+59·0*	+9·0	-2·1	-1·6	+0·6	-24·2
Feb.	-6·3	-9·8	-3·6	+0·7	+1·2	+8·4	*+12·5*	+5·8	+2·6	-11·3	*-11·8*	-7·6	-5·5	+1·8	+1·4	+5·9	+4·8	+4·2	+7·7	+2·0	+0·8	-2·5	-2·2	+0·8
Mar.	-14·6	-61·6	*-80·1*	-27·0	+6·6	+9·6	+18·2	-1·6	-10·7	-14·0	-8·0	-8·8	+13·4	+28·6	+42·5	+62·4	+52·2	*+79·2*	+40·8	+21·2	-20·1	-51·2	-51·8	-25·2
Apr.	-7·2	-33·2	-29·6	-12·8	+1·9	+7·6	+1·2	-9·8	-21·6	*-36·0*	-24·0	-9·2	+8·0	+32·8	*+36·4*	+29·2	+28·4	+34·9	+24·2	+18·2	+13·0	-18·2	-25·4	-8·8
May	+3·5	-0·7	-7·2	-17·9	-6·7	-2·9	-6·5	-10·7	-19·0	-32·3	*-34·3*	-31·5	-22·7	-9·9	+4·8	+16·9	*+36·9*	+36·7	+33·5	+32·5	+24·6	+9·3	+3·1	+0·5
June	-5·4	-13·9	-12·3	-16·2	-8·9	-8·5	-9·6	-12·3	-16·3	-23·4	-33·0	*-39·3*	-21·2	-8·5	+4·9	+26·8	+30·3	+37·7	*+47·2*	+38·7	+24·1	+15·4	+4·7	-0·1
July	+0·3	+2·2	-14·5	-14·6	-19·2	-11·3	-21·2	*-36·2*	-32·7	-32·2	-22·1	-22·0	-17·7	+7·2	+4·9	+30·2	+40·0	*+54·3*	+42·0	+35·6	+25·5	+8·6	+3·3	-10·4
Aug.	+11·1	-22·4	-29·1	*-71·5*	-14·5	+12·6	+4·1	-8·7	-24·3	-34·4	-29·5	-21·1	-4·9	+8·8	+12·3	+15·9	+24·1	+29·4	*+36·7*	+27·3	+23·5	+19·0	+18·5	+17·1
Sept.	-2·0	-19·9	-12·6	+0·1	+5·7	-1·0	+2·7	-15·7	-29·4	*-33·7*	-33·6	-30·7	-11·0	+9·9	+38·6	+54·1	*+74·1*	+49·4	+11·3	+3·3	+2·6	-30·1	-15·0	-17·1
Oct.	*-124·7*	-94·8	-47·3	-14·4	+15·6	+25·9	+23·8	+22·0	+8·5	-9·0	-9·1	-12·4	-10·1	+32·0	*+51·9*	+33·4	+29·0	+37·5	+27·6	+39·4	+21·9	+7·4	-11·7	-42·4
Nov.	+3·8	-7·5	-10·0	+8·1	*+14·3*	+7·8	-1·3	-5·7	+0·4	*-17·9*	-15·6	-10·7	-1·6	+2·1	+3·2	+6·3	+9·7	+4·8	+2·1	+1·7	0·0	+4·9	+5·0	-3·9
Dec.	-12·9	*-58·6*	-39·3	-18·9	-6·1	-18·6	-21·9	-13·9	-7·7	-10·0	-9·5	-1·1	+7·1	+42·0	*+44·1*	+27·1	+7·5	+16·4	+32·9	+30·9	+6·7	-4·8	+1·9	+6·7
Year	-17·0	*-28·9*	-26·0	-17·8	-3·3	+3·3	+1·1	-7·2	-12·6	-21·0	-19·7	-16·5	-5·6	+13·1	+21·4	+27·9	+31·6	*+33·6*	+30·4	+21·7	+10·1	-3·7	-5·7	-8·9
Winter	-16·1	*-25·5*	-19·8	-9·9	-5·1	+1·9	0·0	-3·5	-1·3	-9·3	-10·8	-5·8	-0·3	+14·1	+15·1	+16·4	+15·9	+11·1	*+25·4*	+10·9	+1·3	-1·0	+1·3	-5·1
Equinox	-37·1	*-52·4*	-42·4	-13·5	+7·5	+10·5	+11·5	-1·3	-13·3	-23·2	-18·7	-15·3	+0·1	+25·8	+42·3	+44·8	+45·9	*+50·3*	+26·0	+20·5	+4·3	-23·0	-26·0	-23·4
Summer	+2·4	-8·7	-15·8	-30·1	-12·3	-2·5	-8·3	-17·0	-23·1	*-30·6*	-29·7	-28·5	-16·6	-0·6	+6·7	+22·5	+32·8	+39·5	*+39·9*	+33·5	+24·4	+13·1	+7·4	+1·8

DECLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	*-9·02*	-6·21	-7·45	-5·02	-6·07	+0·11	+2·04	+4·71	+3·99	+4·86	+4·31	+5·25	*+6·04*	+5·53	+5·63	+4·66	+3·29	-3·97	+1·30	-3·81	-2·91	-4·58	-0·71	-1·97
Feb.	+0·70	+1·86	-3·72	-3·70	-2·52	+1·46	+0·20	-0·96	-0·02	+0·60	+2·54	+4·02	+5·36	+6·60	*+7·50*	+4·28	+3·98	+3·16	-6·04	-2·20	*-7·88*	-7·44	-4·68	-3·10
Mar.	-3·10	-10·26	*-10·55*	-3·26	-4·22	-0·98	+0·34	+2·54	+0·79	+2·44	+2·88	+6·18	+7·56	*+9·56*	+7·67	+7·60	+7·74	+4·64	-4·94	-5·06	-4·93	-2·80	-3·86	-5·98
Apr.	-3·24	-3·26	+1·20	-2·22	*-4·66*	-2·31	-2·14	-4·62	-2·94	-1·36	+2·42	+5·40	*+10·10*	+7·16	+7·94	+7·44	+1·82	-3·37	-0·88	-0·78	-2·92	-1·60	-4·44	-2·74
May	-2·00	-2·65	-3·92	+0·54	-1·46	-3·07	-5·22	*-6·54*	-5·08	-2·65	+0·74	+4·32	+7·20	+8·23	*+8·64*	+7·00	+5·38	+3·17	+1·30	+0·62	-3·48	-6·05	-3·30	-1·72
June	-1·72	-2·62	-1·01	-2·40	-3·18	-5·68	-7·06	*-7·92*	-6·33	-3·62	-1·56	+3·14	+5·44	*+7·20*	+6·57	+5·54	+4·88	+3·78	+3·82	+3·12	+0·39	-0·78	-0·12	+0·12
July	-3·70	-4·53	-6·15	*-7·48*	-3·39	-4·01	-3·54	-4·91	-2·91	-0·72	+0·71	+3·17	+5·44	+7·61	*+8·05*	+4·84	+5·13	+4·45	+2·54	+4·17	+0·71	-0·20	-2·17	-3·11
Aug.	-1·31	-2·05	-6·30	*-10·67*	-5·63	-5·57	-5·69	-3·33	-1·94	+0·49	+3·09	+6·01	+8·29	*+8·91*	+7·22	+5·83	+2·79	+1·97	-0·95	+0·29	-1·42	+0·87	+0·31	-1·21
Sept.	-4·16	-0·18	-2·03	-2·70	-2·06	-2·78	-2·90	-2·06	-0·41	-0·50	+3·31	+5·82	+6·00	+5·70	*+9·03*	+7·34	+1·72	+0·90	+0·20	-0·62	-4·79	-4·84	-4·92	*-5·10*
Oct.	-10·05	*-14·70*	-9·99	-9·80	*-2·27*	-1·66	-0·37	+0·58	+0·51	+3·48	+7·27	+9·20	*+11·69*	+11·14	+11·47	+10·32	+5·79	+2·98	-3·51	-0·54	-5·91	-7·20	-4·69	-3·74
Nov.	-3·85	-3·16	-2·51	-1·35	-0·97	+0·96	+4·59	*+6·81*	+2·61	+1·10	+4·33	+3·69	+3·89	+5·12	+2·75	+2·11	-0·69	-0·34	-2·27	*-8·69*	-7·81	-3·32	-1·61	-1·39
Dec.	-3·88	-4·89	-6·98	-6·69	*-10·49*	-0·96	+4·03	+4·79	+2·74	+2·93	+5·22	+4·75	+4·74	*+6·91*	+4·28	+5·95	+2·55	-0·18	-2·93	-5·59	-0·94	-1·25	-1·92	-2·19
Year	-3·78	-4·39	*-4·95*	-4·56	-3·91	-2·04	-1·31	-0·91	-0·75	+0·59	+2·94	+5·08	+6·81	*+7·47*	+7·23	+6·08	+3·70	+1·43	-1·03	-1·59	-3·49	-3·27	-2·68	-2·68
Winter	-4·01	-3·10	*-5·16*	-4·19	-5·01	+0·39	+2·71	+3·84	+2·33	+2·39	+4·10	+4·43	+5·01	*+6·04*	+5·04	+4·25	+2·28	-0·33	-2·48	-5·07	-4·88	-4·15	-2·23	-2·16
Equinox	-5·14	*-7·10*	-5·35	-4·49	-3·30	-1·93	-1·27	-0·89	-0·51	+1·01	+3·97	+6·65	+8·84	+8·39	*+9·03*	+8·17	+4·27	+1·29	-2·28	-1·75	-4·64	-4·11	-4·48	-4·39
Summer	-2·18	-2·96	-4·35	-5·00	-3·41	-4·58	-5·38	*-5·67*	-4·07	-1·63	+0·75	+4·16	+6·59	*+7·99*	+7·62	+5·80	+4·55	+3·34	+1·68	+2·05	-0·95	-1·54	-1·32	-1·48

VERTICAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	*-56·1*	-50·6	-49·8	-37·5	-23·4	-17·8	-16·1	-14·4	-7·4	-5·4	+0·4	+5·1	+9·6	+11·4	+17·2	+32·9	*+52·9*	+46·4	+47·4	+40·3	+26·4	+11·2	-0·4	-22·3
Feb.	-33·4	*-51·7*	-36·7	-19·8	-11·5	-19·7	-23·0	-11·7	-6·9	-0·8	-1·7	-1·7	+0·6	+4·1	+13·3	+32·8	+43·3	+43·7	*+47·8*	+33·9	+22·3	+3·4	-7·9	-18·7
Mar.	-99·1	*-115·1*	-91·0	-61·5	-23·9	-31·3	-26·7	-11·1	-2·2	+4·9	+15·9	+22·1	+22·7	+42·3	+79·8	+107·5	+100·1	+109·3	*+115·1*	+43·5	-10·2	-28·3	-73·5	-89·3
Apr.	-49·5	-50·5	-43·7	-42·1	-21·5	-18·7	-16·3	-7·5	-3·9	-0·5	+15·7	+9·5	+31·1	+53·3	+55·1	*+64·5*	+63·1	+60·5	+47·9	+33·1	+9·9	-47·1	*-74·3*	-68·1
May	-11·3	-22·4	-27·3	-38·5	*-39·9*	-29·2	-21·7	-11·5	-5·5	-2·2	-3·1	-3·3	-0·9	+6·6	+16·9	+31·5	+36·5	*+38·2*	+37·7	+32·7	+17·9	+8·6	-3·3	-6·5
June	-24·3	-31·4	-32·0	-37·9	*-43·0*	-28·8	-16·9	-7·8	-2·8	-1·3	+1·6	-0·4	+1·9	+9·8	+19·4	+28·1	+37·6	*+40·0*	+35·5	+30·6	+21·4	+11·1	+1·0	-11·4
July	-30·8	-27·8	-49·0	*-66·4*	-56·6	-57·5	-50·6	-29·4	-14·8	-1·6	+11·6	+11·8	+17·4	+21·8	+31·8	+33·8	+36·0	+51·3	*+57·2*	+43·4	+38·0	+25·6	+10·0	-5·2
Aug.	-16·9	-49·1	-96·0	*-125·3*	-66·9	-22·9	-1·1	+3·9	+7·8	+12·7	+12·5	+13·3	+13·3	+21·5	+36·2	+45·9	*+48·9*	+42·1	+39·9	+31·5	+21·8	+17·3	+7·7	+1·9
Sept.	-33·4	-70·8	*-73·8*	-59·6	-36·8	-19·0	-10·6	+1·8	+3·8	+8·0	+11·6	+17·2	+19·8	+32·0	+43·8	+59·0	*+75·4*	+67·6	+49·6	+41·8	+24·4	-38·8	-55·0	-58·0
Oct.	-63·5	*-99·0*	-78·9	-73·6	-48·4	-26·5	-10·2	-6·0	-0·1	+3·6	-0·3	+14·0	+18·1	+32·2	+55·3	+57·4	+58·8	*+77·5*	+71·2	+58·0	+21·3	+1·8	-15·9	-46·8
Nov.	-8·1	-19·5	-34·9	*-43·1*	-25·9	-21·3	-22·7	-25·7	-14·1	+3·9	+17·1	+19·1	+18·3	+19·5	+22·9	+27·1	*+34·9*	+34·1	+33·9	+26·9	+6·3	+1·7	-13·9	-36·5
Dec.	+3·2	-19·4	-41·5	-35·2	-54·8	-57·2	*-58·8*	-42·4	-30·9	-2·6	-0·4	+8·4	+20·8	+27·6	+26·9	+24·0	+37·6	+45·6	*+60·4*	+57·6	+28·9	+13·0	-1·0	-9·8
Year	-35·3	-50·6	*-54·5*	-53·4	-37·7	-29·2	-22·9	-13·5	-6·4	+1·6	+6·7	+9·6	+14·4	+23·5	+34·9	+45·4	+52·1	*+54·7*	+53·6	+39·4	+19·0	-1·7	-18·9	-30·9
Winter	-23·6	-35·3	*-40·7*	-33·9	-28·9	-29·0	-30·1	-23·5	-14·8	-1·2	+3·9	+7·7	+12·3	+15·7	+20·1	+29·2	+42·2	+42·5	+47·4	+39·7	+21·0	+7·3	-5·8	-21·8
Equinox	-61·4	*-83·9*	-71·9	-59·2	-32·7	-23·9	-15·9	-5·7	-0·6	+4·0	+10·7	+15·7	+22·9	+39·9	+58·5	+72·1	+74·3	*+78·7*	+70·9	+44·1	+11·3	-28·1	-54·7	-65·5
Summer	-20·8	-32·7	-51·1	*-67·0*	-51·6	-34·6	-22·6	-11·2	-3·8	+1·9	+5·7	+5·3	+7·9	+14·9	+26·1	+34·8	+39·7	*+42·9*	+42·6	+34·5	+24·8	+15·7	+3·9	-5·3

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1945

The ranges are derived from the diurnal inequalities printed in Tables 52 to 54

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	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	23·1	6·31	30·8	9·5	4·14	5·8	108·2	15·06	109·0
Feb.	17·9	8·17	38·1	16·6	6·60	15·3	24·3	15·38	99·5
Mar.	42·4	10·55	77·9	36·0	8·98	18·0	159·3	20·11	230·2
Apr.	42·8	10·38	50·5	40·3	10·20	16·1	72·4	14·76	138·8
May	59·2	11·72	37·5	43·9	9·80	17·0	71·2	15·18	78·1
June	56·7	11·97	23·8	52·4	9·82	17·6	86·5	15·12	83·0
July	57·4	12·69	37·7	56·2	13·41	14·5	90·5	15·53	123·6
Aug.	55·4	12·73	41·9	54·1	11·56	16·0	108·2	19·58	174·2
Sept.	44·0	9·81	41·1	41·0	9·74	14·9	107·8	14·13	149·2
Oct.	35·2	11·15	53·7	37·2	8·93	9·8	176·6	26·39	176·5
Nov.	16·7	5·84	27·2	16·6	4·86	4·8	32·2	15·50	78·0
Dec.	27·2	6·61	37·6	9·1	3·34	5·8	102·7	17·40	119·2
Year	36·8	8·24	38·1	33·8	8·03	9·5	62·5	12·42	109·2
Winter	15·5	6·30	28·7	11·5	4·34	4·8	50·9	11·20	88·1
Equinox	40·1	9·51	53·9	38·5	9·30	10·6	102·7	16·13	162·6
Summer	56·9	12·17	32·6	51·0	11·06	14·9	70·5	13·66	109·9

AVERAGE DEPARTURE

Arithmetical average of diurnal inequalities in Tables 52 to 54 taken regardless of sign

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	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	4·7	1·76	7·7	2·3	1·03	1·3	16·7	4·31	25·1
Feb.	3·9	1·94	8·7	3·5	1·54	3·3	5·1	3·52	20·2
Mar.	9·4	2·79	16·9	8·8	1·92	3·2	31·2	5·00	55·3
Apr.	10·1	2·56	12·8	10·0	1·99	3·6	19·7	3·62	37·0
May	13·0	3·16	9·6	9·9	2·42	4·0	16·9	3·93	18·9
June	12·8	3·02	6·6	11·9	2·67	3·8	19·2	3·75	19·8
July	14·1	3·42	9·0	13·8	3·14	4·3	21·2	3·90	32·5
Aug.	13·2	3·06	8·9	13·4	2·57	3·7	21·7	3·84	31·5
Sept.	9·8	2·73	9·5	10·5	2·22	3·6	21·0	3·34	37·9
Oct.	10·6	3·06	12·5	9·6	2·30	1·8	31·3	2·68	39·1
Nov.	3·8	1·58	6·9	3·8	1·28	1·3	6·8	2·75	21·1
Dec.	4·8	1·82	11·0	2·1	0·87	1·2	18·6	4·07	29·5
Year	8·3	2·42	9·4	7·8	1·88	2·1	16·2	3·45	29·6
Winter	4·0	1·71	8·4	2·7	1·17	1·5	9·5	3·57	24·1
Equinox	9·1	2·77	12·8	9·7	1·96	2·8	24·1	4·30	41·9
Summer	13·1	3·09	8·2	12·2	2·65	3·5	18·7	3·71	25·1

NON-CYCLIC CHANGE

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	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0·5	+0·10	+0·4	+1·8	+0·49	−2·4	+13·2	+2·90	+3·3
Feb.	+0·3	−0·86	+0·1	+5·4	+0·91	+6·5	−3·9	−0·71	−5·5
Mar.	−0·1	−0·18	−0·9	+4·0	−1·62	−8·9	−22·9	−1·31	−13·8
Apr.	+0·2	+0·48	+0·9	+5·0	−0·36	+5·8	−17·5	−1·25	−38·0
May	+0·1	−0·07	+0·4	+2·5	−0·39	+4·0	−5·8	+0·90	−3·6
June	+0·1	−0·15	−0·9	+0·4	−0·23	+1·5	−3·2	−0·20	−8·6
July	−0·2	+0·12	+0·6	+1·6	+0·32	+1·2	−26·8	−0·59	−6·5
Aug.	0·0	−0·15	−0·2	+4·8	−0·06	−2·1	−4·3	−0·18	+2·4
Sept.	−0·6	−0·20	−0·9	+5·9	+0·22	−1·6	−32·3	−1·49	−32·1
Oct.	+0·3	+0·12	+1·0	+3·4	+2·79	−0·8	+68·8	−0·20	+29·0
Nov.	0·0	+0·10	+0·2	+0·9	+0·59	+0·2	−9·4	+0·17	−28·8
Dec.	0·0	−0·15	+0·1	+3·8	+1·11	−3·5	+3·9	+2·85	−4·6
Year	+0·1	−0·07	+0·1	+3·3	+0·36	−0·1	−3·4	+0·73	−8·9
Winter	+0·2	−0·20	+0·2	+3·0	+0·77	+0·2	+0·9	+1·30	−8·9
Equinox	0·0	+0·05	+0·1	+4·6	+0·26	−1·4	−1·0	−1·06	−13·7
Summer	0·0	−0·06	0·0	+2·3	−0·09	+1·1	−10·0	−0·02	−4·1

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, a, quiet, q, and disturbed, d, days for H, D and V and for all days for N, W, I and T

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	14,000γ +			11° +			46,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	368	371	357	30·3	30·4	28·5	956	956	957	14079	2866	72 59·4	49105
Feb.	373	376	369	28·9	28·9	28·2	953	953	954	14085	2861	72 58·8	49104
Mar.	366	370	355	28·5	29·0	27·3	955	960	939	14079	2858	72 59·3	49103
Apr.	369	373	361	28·0	27·8	28·1	960	965	957	14082	2857	72 59·2	49109
May	376	375	374	27·6	27·2	27·5	965	967	962	14089	2856	72 58·8	49116
June	380	377	380	27·0	27·0	27·2	963	965	957	14094	2855	72 58·5	49115
July	374	375	372	26·2	26·2	26·2	961	964	952	14089	2850	72 58·9	49112
Aug.	372	373	362	25·4	25·3	25·0	964	965	952	14087	2846	72 59·1	49114
Sept.	371	372	369	24·3	24·8	23·9	964	964	960	14087	2842	72 59·2	49114
Oct.	361	369	345	23·4	24·3	24·4	970	970	967	14078	2836	72 59·9	49116
Nov.	370	373	361	22·9	22·9	23·0	971	972	970	14087	2836	72 59·4	49120
Dec.	368	374	354	21·5	22·2	19·4	974	969	980	14087	2830	72 59·6	49122
Year	371	373	363	26·2	26·3	25·6	963	964	959	14086	2850	72 59·1	49112

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Night commencing				Night commencing				Night commencing			
			JANUARY				MARCH (contd.)				OCTOBER
3	c	..	Variable cloud	23	b	..	Fine night. Moonlight	1	a-c	⌀	Active aurora with rays and arch 19h.40m. to 3h.2m.
4		⌀	Variable cloud. Homogeneous Arch from 20h.45m.	24	b	..	Fine night. Moonlight	2	a	..	Variable sky
5	ca	⌀	Diffuse aurora between cloud	25	cb	..	Very cloudy night	5	a	⌀	Diffuse aurora with arch 19h.40m. to 1h.40m.
6	a	..	Variable sky, mostly clear	26		⌀	Active aurora 22h.30m. to 23h.36m. Arch and frequent rays and rayed bands. Full moon prevented observation of any but the brightest features	6	a-c	⌀	Diffuse aurora suspected behind cloud
7	ac	⌀	Cloudy, diffuse aurora between cloud					7	c	⌀	Diffuse surface seen 21h.15m.
8	a	..	Variable sky					8	c	⌀	Aurora suspected
9	a	⌀	Bright aurora from 21h.30m. to 22h.45m.	27	b	⌀	Rays and homogeneous arch to 25° moonlight	9	a-c	⌀	Diffuse aurora, north-west to north-east
10	ac	..	Variable sky, frequently very cloudy	30	c	..	Very cloudy night	10	c	⌀	Glow observed through cloud breaks
11	ac	..	Mainly cloudy					11	a-c	..	Variable sky
12	ca	⌀	Diffuse aurora, 20h. to 22h.					12	a	⌀	Active aurora with rays, flaming at 23h.35m.
14	c	..	Variable sky								
16	c-a	⌀	Cloudy sky clearing gradually. Faint aurora at 20h.				APRIL	13	a	⌀	Diffuse aurora 23h. to 4h.
17	ca	⌀	Diffuse aurora through breaks in cloud	1	a	⌀	Homogeneous Arch with rays to 40° and diffuse surface	16	a-b	⌀	Diffuse aurora
18	b	..	Variable sky					27	a-b	⌀	Vivid and very active aurora from 19h. to 5h. Most intense 00h.50m.
19	cb-b	⌀	Diffuse aurora 17h. to 22h. then arch to 23h.	2	a-c	..	Very cloudy	30	a	..	Partly cloudy, becoming very cloudy
21	bc	..	Variable sky. Moonlight	3	a-c	..	Very cloudy	31	a	⌀	Rays to 25° at 21h.50m.
22	b	..	Variable sky. Moonlight	4	a	..	Partly cloudy				
23	bc	..	Very cloudy. Moonlight	6	ca	⌀	Aurora suspected behind cloud				
24	bc-b	..	Variable sky. Moonlight	10	a	..	Cloudy night				
25	b	..	Mainly fine night. Moonlight	11	ca	⌀	Very cloudy, but bundles of rays seen through cloud to 40°				NOVEMBER
27	c-b	..	Cloudy at first, clearing 21h. Moonlight	13	a	⌀	Rays to 20° in north-east at 21h.30m.				
				16	b	..	Partly cloudy. Moonlight	1	a	..	Mainly fine night
28	b	..		18	bc	..	Cloudy night. Moonlight	2	a	..	Fine night
				21	b	..	Partly cloudy. Moonlight	5	c-a	..	Sky covered at first then clearing
				22	bc	..	Very cloudy	6	c	..	Very cloudy night
				24	bc	..	Very cloudy	7	c-a	..	Cloudy at first, then fine
			FEBRUARY	25	b	..	Cloudy	8	a	..	Cloudy to partly cloudy
				26	b	..	Cloudy	9	a	..	Slight cloud
1	b	..	Variable sky	27	bc	..	Very cloudy	10	a	..	Cloudy at first, then fine
2	b-a	⌀	Diffuse aurora, partly cloudy	30	bc	..	Very cloudy	11	ca	..	Mainly very cloudy
3	a	..	Variable sky					16	a-b	..	Cloudy to partly cloudy
4	a	..	Cloudy, decreasing					17	b	..	Cloudless with bright moonlight
5	c-a	..	Very cloudy then decreasing					18	b	..	Partly cloudy, bright moonlight
8	c-a	..	Very cloudy to 20h. then slight cloud				SEPTEMBER	24	bc	..	Mainly very cloudy, moonlight
								25	bc	..	Very cloudy
9	c-a	⌀	Diffuse aurora mainly masked by cloud	1	a-b	⌀	Fine, Rays to 15° north-east	27	bc-b	..	Variable sky
10	c	..	Cloudy all night	2	a-b	..	Fine night	30	bc-b	..	Variable sky
11	a	..	Mainly fine night	3	a	⌀	Rays to 20° north-west to north 22h.15m.				
13	b	..	Cloudy with frequent clear periods. Moonlight								DECEMBER
				4	a	⌀	Diffuse aurora				
14	c-b	⌀	Active aurora. Much cloud to 22h. then clear	5	a	⌀	Diffuse aurora 00h.15m. to 2h.30m.	2	c	⌀	Diffuse aurora, obscured by cloud
				6	c	⌀	Auroral light suspected behind cloud	3	c-a	..	Cloudy to partly cloudy
15	b	⌀	Active aurora, mainly fine sky	7	c-a	⌀	Diffuse aurora 2h. to 3h.	5	a	..	Mainly fine night
16	b	⌀	Diffuse aurora between breaks in cloud	9	a	⌀	Diffuse aurora with rays 22h.45m. to 1h.	6	a	⌀	Auroral Arch at 23h.10m.
								9	c-a	..	Mainly variable sky
20	b	..	Bright moonlight	14	c	..	Partly cloudy to very cloudy	13	c-a	⌀	Variable sky with active aurora 21h.40m. to 6h.30m. Rayed bands reaching zenith, greatest intensity at midnight to 1h.
22	cb	..	Very cloudy	15	ca	⌀	Diffuse surface suspected behind cloud				
23	cb	..	Very cloudy								
24	cb	..	Very cloudy	16	ca	⌀	Diffuse aurora suspected in north				
				17	ca	⌀	Diffuse surface seen through gaps in cloud	14	c-a-c	..	Very cloudy generally with occasional clear intervals
				18	b	⌀	Rays to 50° west north-west to east north-east 21h.30m.	15	ac	..	Very cloudy generally
			MARCH					17	c	..	Very cloudy night
				19	cb	⌀	Diffuse aurora seen in cloud gap	18	c	..	Very cloudy, with occasional clear intervals
1	b	..	Partly cloudy	21	cb-b	..	Very cloudy, then partly cloudy				
3	cb	..	Very cloudy to partly cloudy	22	b-cb	..	Partly cloudy becoming overcast	20	c-a	..	Cloudy night
4	b	⌀	Diffuse aurora at 23h.45m.	23	b	..	Variable sky	21	a-c	..	Fine at first, then very cloudy by 3h.
9	b	..	Variable sky, much cloud at times	24	b	..	Variable sky				
10	b	..	Cloudy to 21h. then fine	25	b-bc	..	Cloudy at first, then overcast	23	c	⌀	Diffuse aurora through cloud
11	a-b	..	Cloudy then fine	26	bc	..	Mainly cloudy night	26	c	⌀	Diffuse aurora to 30° at 23h.50m.
15	ac	⌀	Rays seen through gap in cloud at 22h.47m.	27	b	⌀	Diffuse aurora north-west to north-east	28	c	..	Very cloudy night
								29	c	..	Very cloudy night
20	c-b	⌀	Diffuse aurora and rays 20h. to 22h.40m.	28	b	..	Cloudy night	30	c-a	..	Very cloudy to 23h. then partly cloudy
				30	a-bc	⌀	Active aurora 19h.50m. to 22h.40m. Rays and homogeneous arch				
22	b	..	Fine night. Moonlight					31	c	..	Very cloudy night

In the interests of brevity there have been omitted from Table 59 all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol ⌀. The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol ..; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora.

The letters a, b, c, have the following significance:-

a = Conditions favourable for seeing aurora
b = Unfavourable for faint aurora (moonlight, mist, Cs, etc.) but not such as to mask bright aurora
c = Cloudy, but aurora not seen in clear intervals
ca, cb = Have been used for "Cloudy, with conditions a or b in the intervals"
Changing conditions have been indicated by a hypen, e.g., a-c

60 OTHER SCOTTISH STATIONS 1945

Night commencing		Night commencing		Night commencing	
	JANUARY		APRIL (contd.)		OCTOBER (contd.)
4	Sumburgh	13	Sullom Voe	16	Fair Isle South, 19h.-24h.
9	Sumburgh; Noup Head, 1h.-2h. (10th) north-east to west; Stornoway; Alness; Nairn; Montrose; Kettins; Errol; Edinburgh	19	Stornoway	23	Benbecula
				27	B.; Bressay; Hoy High; Wick; Stornoway; Nairn; Benbecula; Neist Point, 20h.-24h.
10	Sumburgh		MAY		
16	Duntuilm				
		10	Lossiemouth; Errol		
		17	Montrose		
		18	Montrose		NOVEMBER
	FEBRUARY			1	Stornoway
			JUNE	2	Stornoway
14	Sumburgh			5	Stornoway
15	Sumburgh; Noup Head, 20h.-22h.30m., north-west to north-east; Alness; Lossiemouth; Nairn; Paisley	13	Montrose	8	Duntuilm; Stornoway; Benbecula; Fort William; Edinburgh
				9	Duntuilm; Stornoway; Benbecula; Edinburgh
16	Alness		JULY	10	Alness
				12	Alness; Nairn, 18h.30m.; Benbecula
		30	Stornoway	13	Stornoway; Benbecula
	MARCH				
5	A.; Montrose; Edinburgh		AUGUST		
12	Lossiemouth; Nairn; A.				DECEMBER
15	Alness; Benbecula		Nil		
26	Stornoway				
				2	Stroma
				5	Benbecula
			SEPTEMBER	9	Stornoway
				13	Hellyar Holm, 21h.-24h.; Stroma, 20h.-22h.30m.; Benbecula; West Linton
	APRIL	18	Fair Isle South, 20h.30m.-24h.		
1	Stornoway; Lossiemouth			14	Stornoway; Alness; A.
5	Sullom Voe; Stornoway; Nairn; Lossiemouth Montrose; Kettins; Pitlochry; Prestwick; Eskdalemuir			19	Nairn
			OCTOBER	20	Nairn
				25	Duntuilm; Alness
6	Wolfelee; Eskdalemuir	7	Peterhead	26	Stornoway
12	West Linton	12	Dungavel	27	Stornoway

For brevity, stations which figure frequently in the above table are represented by their initials, namely A - Aberdeen, B - Baltasound, D - Derrness, E - Eskdalemuir, G.C. - Gordon Castle, K - Kirkwall.

ABERDEEN

ABERDEEN OBSERVATORY

Latitude	57°10′ N.
Longitude	2°06′ W.
G.M.T. of Local Mean Noon	12h. 8m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	26·0	..
Thermometer bulbs, north-wall screen	..	12·5
Rain-gauge site	24·1	..
Beckley rain-gauge rim	..	0·6
Dines tilting siphon recorder	..	..
Sunshine recorder	..	20·7
Pressure-tube anemograph	37	13
Robinson cup anemograph	36	23

INTRODUCTION

A description of the site and instruments is given in the *Observatories' Year Book* for 1938, and no noteworthy changes have occurred except that The Beckley rain-gauge No.2 which had been the recording instrument since the Observatory was established was replaced on the 12 March by a Dines Tilting siphon gauge M.O.161.

REVIEW OF THE METEOROLOGICAL RESULTS

The mean temperature for the year was 282·2°A., a little higher than the normal. The extremes recorded in the north-wall screen were 298·3°A. on July 5 and 263·0°A. on January 23. The lowest reading of the grass minimum thermometer was 260·4°A. on January 23.

The total rainfall for the year was 878 mm.; 130 mm. more than the normal.

The sunshine total, 1308 hr., was a little below the normal.

The highest wind speed recorded in a gust was 30 m./sec. on January 18.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. Average values of the various coefficients for the period 1871-1926 computed by Dr. A. Crichton Mitchell* are given for comparison. Dr. Mitchell gave the phase angles in local apparent time and in volumes of the *Observatories' Year Book* earlier than 1935 they were so quoted; the angles have now been converted to local mean time.

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* MITCHELL, A. CRICHTON: Diurnal variation of pressure and temperature at Aberdeen 1871-1926 *Quart, J.R. met. Soc., London*, **55**, 1929, p.197.

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ABERDEEN, LONGITUDE 2°06′ W.

Values of c_η, α_η in the series $\sum c_\eta \sin(15nt + \alpha_\eta)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.16	0.09	288	169	0.28	0.23	145	146	0.13	0.13	355	348	0.07	0.05	218	211
February	0.77	0.16	230	173	0.13	0.27	137	143	0.12	0.10	27	346	0.05	0.03	99	84
March	0.37	0.16	343	156	0.28	0.29	131	147	0.04	0.05	356	330	0.05	0.03	27	27
April	0.05	0.15	143	155	0.31	0.28	141	151	0.06	0.02	136	188	0.05	0.04	357	359
May	0.07	0.10	96	136	0.22	0.24	129	145	0.06	0.06	171	166	0.02	0.02	344	333
June	0.14	0.06	140	104	0.15	0.22	144	141	0.05	0.07	157	155	0.01	0.01	333	331
July	0.04	0.09	23	135	0.19	0.21	133	142	0.09	0.07	162	155	0.03	0.01	315	339
August	0.17	0.11	156	161	0.25	0.23	143	144	0.05	0.04	173	165	0.01	0.03	306	333
September	0.20	0.12	127	147	0.22	0.29	129	151	0.01	0.03	197	346	0.05	0.05	18	345
October	0.04	0.15	57	187	0.31	0.27	161	156	0.07	0.07	5	0	0.02	0.03	71	34
November	0.10	0.13	272	201	0.25	0.23	144	159	0.08	0.10	348	4	0.01	0.01	170	186
December	0.39	0.16	167	169	0.26	0.21	164	147	0.11	0.12	13	357	0.05	0.05	165	205
Arithmetic mean	0.21				0.24				0.07				0.03			
Year	0.08	0.12	205	162	0.23	0.25	142	148	0.02	0.03	33	359	0.01	0.01	26	338
Winter	0.28	0.13	223	178	0.23	0.23	149	149	0.11	0.11	7	353	0.03	0.03	170	194
Equinox	0.06	0.14	30	162	0.27	0.28	141	151	0.02	0.03	37	345	0.04	0.04	20	6
Summer	0.08	0.09	133	139	0.20	0.22	137	143	0.06	0.06	165	159	0.02	0.02	325	334

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

PRESSURE AT STATION LEVEL

Maximum, Minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

61 ABERDEEN: h_b (height of barometer cistern above M.S.L.) = 26·0 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	28·6	24·8	26·6	95·8	86·4	91·3	31·0	05·5	18·8	85·6	*78·1*	*82·6*	*17·9*	14·6	*16·8*	02·5	97·8	00·1
2	25·0	06·4	16·7	02·6	83·4	88·4	*37·7*	31·0	35·6	95·3	84·7	90·0	14·6	07·6	10·9	06·7	01·3	03·9
3	06·4	98·6	00·7	14·6	00·3	09·7	37·6	29·2	33·7	99·6	92·8	95·6	07·6	03·4	04·7	06·7	98·8	03·8
4	10·4	00·6	05·1	06·3	91·9	99·6	29·3	28·2	28·7	06·5	99·6	04·7	04·2	99·7	01·6	06·0	97·9	00·4
5	11·8	06·9	09·8	04·5	99·3	01·1	28·2	23·8	24·8	17·5	03·9	09·5	00·8	98·9	00·0	09·5	05·5	08·0
6	10·1	04·6	07·3	07·8	91·5	03·1	26·1	23·9	25·0	32·1	17·5	25·4	08·9	98·1	02·7	05·5	96·6	99·6
7	05·1	99·8	02·8	96·3	*82·1*	87·8	29·1	24·4	26·2	*32·3*	29·5	*31·0*	14·3	08·9	12·5	01·2	*90·7*	*95·5*
8	07·2	03·0	05·7	98·1	85·6	93·7	36·3	29·1	33·6	29·6	26·2	27·9	14·1	11·4	12·9	07·6	91·8	99·7
9	12·2	06·2	09·3	95·3	85·1	90·6	36·8	35·5	*36·1*	29·3	27·0	28·3	11·7	04·2	06·6	11·1	07·6	08·7
10	18·3	12·1	14·1	89·6	85·1	*87·0*	35·5	31·6	32·8	28·5	19·6	24·4	11·8	07·4	09·0	14·9	11·0	13·4
11	28·8	18·3	23·7	93·3	89·6	90·4	33·4	27·6	31·4	18·6	08·8	13·9	16·0	11·8	14·3	14·2	02·8	08·2
12	33·7	28·8	32·0	95·1	82·7	91·6	27·6	21·4	23·6	08·8	03·7	06·2	14·8	08·5	11·5	19·0	02·5	09·2
13	*35·2*	33·1	*34·3*	95·9	83·9	90·5	26·4	21·8	24·4	16·1	07·4	12·7	08·5	*91·0*	98·0	18·8	09·2	12·7
14	33·2	27·9	29·5	13·3	95·5	04·7	22·2	15·7	18·9	15·9	07·0	12·0	02·0	91·2	*95·9*	13·5	08·3	11·3
15	27·9	11·5	20·6	15·9	13·3	15·0	15·7	10·8	12·5	15·8	09·0	13·0	05·1	02·0	03·5	08·3	99·0	02·5
16	11·5	89·6	00·1	17·5	12·9	14·4	14·2	08·2	09·8	15·8	11·6	13·3	04·9	00·5	02·2	19·1	07·1	15·4
17	00·1	88·8	95·3	17·7	13·6	15·7	19·8	14·2	18·2	15·7	13·8	14·9	14·6	01·0	07·1	18·7	09·8	14·2
18	88·8	*63·6*	*73·9*	26·0	14·6	19·3	18·8	09·0	13·9	27·7	15·7	22·4	16·8	14·5	15·7	17·7	08·9	12·1
19	92·2	75·1	86·5	26·7	17·9	23·7	09·0	93·2	02·1	27·7	17·5	24·3	14·5	11·7	13·4	19·0	16·2	17·9
20	97·9	89·2	92·7	*30·6*	17·6	*24·8*	13·4	96·0	05·8	17·5	10·4	14·0	11·7	01·7	07·5	16·2	05·8	11·3
21	07·3	97·9	01·6	30·4	17·1	22·8	15·3	13·4	14·1	12·8	08·2	09·9	03·5	99·8	01·9	12·6	05·6	08·7
22	08·9	04·2	07·3	25·4	17·2	22·9	16·9	14·0	15·6	18·5	12·8	15·9	06·9	02·2	03·2	16·1	12·2	14·5
23	04·3	00·9	01·8	23·8	21·9	22·5	17·9	14·4	16·0	19·8	17·1	18·7	15·5	06·9	12·1	16·0	13·0	14·5
24	08·1	01·4	04·6	22·1	98·5	10·9	14·4	07·3	10·2	17·1	12·7	14·2	15·4	08·3	12·6	22·5	13·3	18·0
25	13·2	08·1	11·4	03·4	96·9	00·6	07·3	00·8	04·4	14·1	10·9	13·0	08·4	02·1	05·8	*22·9*	17·7	*20·9*
26	12·6	10·6	11·3	16·4	98·7	07·3	14·9	07·1	11·8	10·9	03·7	06·2	02·1	00·2	00·8	17·7	12·1	14·8
27	19·6	11·0	14·4	20·7	15·6	17·7	14·7	07·6	11·1	04·6	02·2	03·9	00·7	98·9	00·5	12·1	07·8	10·4
28	30·6	19·6	26·5	20·9	04·3	14·9	10·5	01·7	06·4	02·2	94·3	97·3	00·4	98·6	99·2	07·8	04·8	06·0
29	29·6	06·8	21·2				01·7	91·4	96·9	12·6	00·5	07·7	99·9	96·3	98·4	04·8	01·8	03·5
30	06·8	85·7	92·1				99·1	94·0	96·3	17·6	12·3	14·2	01·5	97·5	99·6	01·8	96·1	99·6
31	97·9	87·6	94·0				98·5	*80·4*	*90·8*				03·0	98·7	01·2			
Mean	13·65	03·96	08·80	10·93	00·09	05·79	20·62	13·30	17·09	15·54	08·62	12·25	08·78	03·15	05·88	12·35	05·10	08·62

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	00·7	*95·4*	*97·4*	*21·6*	20·1	*21·1*	18·9	17·0	17·8	33·7	28·9	31·4	15·7	11·3	14·5	07·4	94·9	01·8
2	11·5	00·7	07·3	21·5	20·0	20·8	22·2	18·9	20·7	*34·4*	32·4	*33·4*	17·0	15·1	16·0	94·2	89·6	92·6
3	11·5	07·5	09·9	21·1	15·7	18·9	22·1	20·0	21·4	32·9	27·9	30·8	17·0	14·5	16·0	12·8	93·7	02·9
4	07·5	04·4	05·4	15·7	11·3	12·7	25·2	19·5	21·9	27·9	22·2	24·1	18·3	13·0	15·2	13·0	96·8	06·2
5	04·8	03·3	04·2	13·6	09·8	11·1	25·5	23·8	24·8	30·5	25·7	29·0	24·5	18·3	21·3	14·3	96·6	04·2
6	04·1	02·5	03·0	09·8	05·0	07·2	24·1	23·0	23·5	29·5	26·5	27·6	25·7	23·1	24·7	21·4	14·2	19·7
7	12·2	03·4	07·5	11·1	04·4	07·1	24·0	20·9	22·6	27·2	16·0	22·7	23·1	08·3	14·7	24·5	19·9	22·0
8	14·8	12·2	14·1	14·3	11·0	12·8	20·9	18·1	19·2	16·6	13·6	15·4	13·5	08·4	10·4	27·1	23·5	*25·4*
9	14·2	07·7	12·0	13·9	10·6	12·2	18·4	15·5	17·5	13·7	00·6	05·2	19·5	13·5	16·4	23·5	19·5	20·6
10	08·9	05·5	07·1	10·8	08·7	09·5	15·5	10·9	12·7	15·6	00·2	06·0	22·5	19·2	21·3	23·6	20·6	21·9
11	10·1	08·3	08·9	14·0	10·8	12·5	13·9	10·7	12·5	25·2	15·6	21·6	21·1	14·9	18·0	*27·4*	20·0	24·2
12	16·8	10·1	13·1	16·4	13·6	15·0	14·1	02·7	10·5	27·1	24·8	25·9	19·1	14·4	16·3	25·3	07·1	18·1
13	19·6	16·8	18·6	16·1	11·1	14·0	03·0	95·2	98·8	26·8	25·2	26·1	20·8	18·9	20·1	18·3	04·8	10·7
14	17·7	09·4	12·5	11·1	06·5	08·4	95·2	92·5	93·0	25·8	24·5	25·1	20·8	18·5	19·7	18·6	09·5	14·7
15	12·9	06·5	10·8	06·5	03·1	04·4	00·4	92·8	97·1	24·8	21·7	22·8	18·5	16·7	17·2	09·5	00·3	05·0
16	10·8	02·8	04·4	06·3	02·7	04·6	01·9	99·2	00·4	24·7	22·9	23·8	20·6	17·1	18·3	00·3	83·7	89·3
17	*21·1*	10·8	18·6	09·7	06·0	07·5	03·8	01·9	02·6	24·4	21·9	22·9	26·7	20·6	24·1	85·1	65·0	72·9
18	20·3	12·1	17·4	10·1	08·8	09·7	03·5	99·9	02·5	22·1	18·8	20·1	*26·8*	23·9	*25·9*	66·7	*56·8*	*63·6*
19	12·1	99·9	04·8	08·8	05·0	06·4	02·3	97·4	99·0	18·8	13·3	16·8	24·0	15·9	19·3	80·1	63·4	68·4
20	02·5	97·1	98·6	05·1	03·5	04·2	06·2	99·5	03·4	13·4	04·5	08·9	15·9	14·5	14·9	98·5	80·1	90·6
21	06·1	02·5	04·6	03·5	97·0	99·6	08·7	00·5	05·9	04·7	94·5	01·3	18·9	14·3	16·3	01·8	98·4	00·7
22	11·8	02·8	07·3	04·7	96·4	99·9	00·5	*76·4*	*86·6*	97·2	93·9	95·9	19·3	15·6	18·1	99·6	87·7	92·4
23	15·9	11·2	12·5	04·9	92·4	00·8	01·3	86·2	89·2	96·6	86·2	90·5	15·6	10·5	12·1	87·7	84·2	86·7
24	17·8	15·9	17·1	95·4	*89·6*	*92·1*	19·8	01·3	13·1	87·8	68·6	77·9	13·6	10·0	11·3	84·2	76·7	78·6
25	16·9	14·0	15·2	10·6	94·9	00·4	22·5	19·6	21·5	70·0	63·6	*67·2*	14·4	08·3	12·2	97·2	77·9	86·8
26	14·3	12·9	13·4	16·5	10·6	14·9	21·6	16·3	17·8	82·0	*63·4*	70·1	22·0	11·3	18·9	03·6	93·6	00·5
27	14·9	12·2	13·4	15·5	11·5	13·1	17·8	14·4	15·2	94·4	82·0	90·6	21·0	09·8	14·3	96·0	88·1	92·5
28	15·7	14·1	14·7	15·7	10·8	13·9	20·8	13·2	16·0	93·9	91·5	92·8	12·2	05·1	09·8	94·7	91·4	92·3
29	19·0	14·8	15·9	11·9	08·0	09·5	23·7	20·8	22·6	99·7	92·2	97·0	05·2	*02·1*	*03·2*	10·2	92·7	02·0
30	20·8	17·7	*19·7*	14·9	11·9	13·7	*29·0*	23·1	*25·5*	08·9	98·7	02·8	08·0	04·2	06·9	18·0	10·2	15·1
31	20·5	17·0	18·3	17·6	14·5	16·1				11·3	04·5	06·7				19·1	17·9	18·5
Mean	13·15	08·11	10·57	11·89	07·27	09·49	14·23	08·37	11·18	14·25	07·30	10·72	18·71	13·71	16·25	06·57	96·09	01·32
									Annual	13·39	06·28	09·83						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

62 ABERDEEN: h_b = 26 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	09·37	09·25	09·17	09·07	08·98	08·88	08·75	08·90	09·21	09·39	*09·48*	09·45	09·15	08·75	08·53	08·45	08·42	08·41	08·35	08·39	08·37	08·42	08·37	08·25	*08·19*	08·80
Feb.	05·21	05·05	04·88	04·77	*04·70*	04·76	05·03	05·33	05·55	05·93	06·21	06·43	06·41	06·49	06·41	06·41	06·51	*06·53*	06·50	06·31	06·06	05·86	05·77	05·63	05·69	05·79
Mar.	17·59	17·61	17·52	17·39	17·28	17·29	17·38	17·54	17·65	17·63	*17·68*	17·66	17·46	17·15	16·91	16·65	16·41	*16·29*	16·36	16·46	16·56	16·57	16·67	16·73	16·82	17·09
Apr.	11·91	11·83	11·71	11·55	*11·38*	11·54	11·75	12·00	12·14	12·27	12·35	12·35	12·41	12·36	12·32	12·23	12·22	12·21	12·29	12·51	12·86	12·95	13·10	*13·14*	13·11	12·25
May	*06·43*	06·32	06·14	05·99	05·85	05·84	05·91	05·99	05·99	05·95	06·01	06·02	05·95	05·91	05·81	05·69	05·57	*05·45*	05·47	05·58	05·70	05·92	05·94	05·89	05·82	05·88
June	08·86	08·75	08·64	08·45	*08·42*	08·45	08·49	08·51	08·55	08·63	08·61	08·56	08·58	08·63	08·57	08·56	08·50	08·52	08·55	08·67	08·73	08·88	*08·91*	08·89	08·77	08·62
July	10·34	10·32	10·20	*10·09*	10·14	10·21	10·31	10·46	10·57	10·58	10·60	10·62	10·65	10·68	10·66	10·59	10·54	10·47	10·45	10·61	10·83	11·04	*11·16*	11·14	11·12	10·57
Aug.	09·78	09·60	09·40	09·24	*09·14*	09·17	09·26	09·34	09·41	09·49	09·58	09·57	09·56	09·50	09·47	09·41	09·34	09·35	09·35	09·51	09·74	09·83	*09·88*	09·80	09·69	09·49
Sept.	11·37	11·25	11·12	10·93	10·77	*10·73*	10·85	10·88	10·95	11·06	11·07	11·16	11·21	11·20	11·14	11·10	11·02	11·04	11·19	11·39	11·59	11·62	11·70	11·72	*11·75*	11·18
Oct.	*11·17*	11·07	10·85	10·71	10·67	10·62	10·68	10·86	11·04	11·05	11·11	11·02	10·83	10·56	10·42	*10·24*	10·24	10·36	10·54	10·64	10·69	10·73	10·73	10·68	10·60	10·72
Nov.	16·37	16·27	16·23	16·10	16·01	*15·99*	16·06	16·17	16·38	16·51	*16·69*	16·68	16·52	16·35	16·15	16·02	16·03	16·08	16·11	16·18	16·27	16·29	16·28	16·24	16·24	16·25
Dec.	01·38	01·10	00·99	00·81	00·65	*00·61*	00·70	00·83	00·96	01·20	01·44	01·43	01·31	01·16	01·14	01·22	01·51	01·65	01·78	01·93	*01·95*	01·91	01·93	01·86	01·75	01·32
Annual	09·98	09·87	09·74	09·59	*09·50*	09·51	09·60	09·73	09·86	09·98	10·07	10·08	*10·00*	09·90	09·79	09·71	09·69	09·70	09·75	09·85	09·95	10·00	10·04	10·00	09·96	09·83

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

63 ABERDEEN: h_b = 26 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	12·65	12·54	12·46	12·37	12·27	12·17	12·04	12·19	12·50	12·67	*12·77*	12·73	12·42	12·02	11·79	11·72	11·70	11·68	11·63	11·66	11·64	11·69	11·65	11·53	*11·47*	12·08
Feb.	08·43	08·27	08·10	07·98	*07·92*	07·98	08·25	08·55	08·77	09·15	09·43	09·64	09·61	09·68	09·60	09·61	09·71	*09·74*	09·71	09·53	09·28	09·08	08·99	08·85	08·91	09·00
Mar.	20·82	20·85	20·76	20·63	20·52	20·54	20·63	20·79	20·88	20·86	*20·90*	20·87	20·66	20·35	20·11	19·86	19·61	*19·50*	19·58	19·68	19·78	19·80	19·90	19·96	20·05	20·31
Apr.	15·16	15·05	14·93	14·77	*14·61*	14·77	14·98	15·22	15·35	15·47	15·55	15·54	15·60	15·55	15·51	15·41	15·41	15·41	15·49	15·71	16·07	16·17	16·33	*16·36*	16·36	15·46
May	*09·61*	09·51	09·33	09·18	09·04	09·03	09·09	09·17	09·16	09·12	09·18	09·18	09·11	09·07	08·97	08·84	08·73	*08·61*	08·63	08·74	08·87	09·10	09·11	09·07	09·00	09·05
June	12·02	11·92	11·81	11·63	*11·59*	11·62	11·64	11·66	11·69	11·76	11·74	11·69	11·71	11·75	11·69	11·68	11·63	11·65	11·68	11·80	11·87	12·03	*12·06*	12·05	11·93	11·76
July	13·48	13·46	13·34	*13·24*	13·29	13·35	13·45	13·59	13·69	13·70	13·72	13·73	13·76	13·79	13·78	13·71	13·65	13·58	13·56	13·73	13·96	14·17	*14·30*	14·28	14·26	13·70
Aug.	12·93	12·75	12·56	12·39	*12·30*	12·33	12·42	12·48	12·54	12·62	12·71	12·69	12·68	12·62	12·59	12·53	12·46	12·47	12·48	12·65	12·88	12·98	*13·03*	12·95	12·84	12·62
Sept.	14·54	14·41	14·29	14·10	13·94	*13·90*	14·02	14·04	14·11	14·21	14·20	14·29	14·34	14·33	14·27	14·23	14·15	14·18	14·33	14·54	14·74	14·78	14·86	14·88	*14·92*	14·33
Oct.	*14·35*	14·26	14·04	13·90	13·85	13·80	13·87	14·05	14·22	14·23	14·28	14·17	13·98	13·70	13·56	*13·38*	13·39	13·52	13·70	13·81	13·86	13·90	13·91	13·86	13·78	13·89
Nov.	19·59	19·50	19·46	19·33	19·24	*19·22*	19·29	19·40	19·60	19·74	*19·91*	19·90	19·73	19·56	19·36	19·23	19·24	19·29	19·33	19·39	19·49	19·51	19·50	19·46	19·46	19·47
Dec.	04·59	04·30	04·19	04·01	03·85	*03·81*	03·90	04·03	04·16	04·40	04·64	04·63	04·50	04·36	04·33	04·41	04·71	04·85	04·98	05·13	*05·15*	05·11	05·14	05·06	04·96	04·52
Annual	13·18	13·07	12·94	12·79	*12·70*	12·71	12·80	12·93	13·06	13·16	13·25	*13·25*	13·17	13·06	12·96	12·87	12·86	12·87	12·93	13·03	13·13	13·19	13·23	13·19	13·16	13·01

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

64 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	73·53	73·34	73·26	*73·14*	73·17	73·14	73·23	73·43	73·47	73·67	73·83	74·14	74·45	74·74	74·86	*74·87*	74·54	74·23	74·25	74·31	74·21	74·16	74·16	73·99	73·57	73·92
Feb.	78·06	77·88	78·13	78·33	78·28	78·06	77·91	*77·86*	78·04	78·50	78·95	79·60	80·17	*80·56*	80·46	80·35	80·03	79·57	78·95	78·79	78·76	78·81	78·60	78·41	78·44	78·89
Mar.	80·22	79·90	79·67	79·35	79·19	79·06	*79·01*	79·20	79·80	80·72	81·51	82·27	82·90	*83·14*	83·09	82·89	82·54	82·16	81·54	81·25	81·04	80·91	80·64	80·41	80·21	80·94
Apr.	79·87	79·73	79·43	79·18	79·01	*78·88*	79·03	79·90	80·70	81·31	81·90	82·33	82·60	82·90	*83·01*	82·84	82·44	82·12	81·62	81·18	80·60	80·39	80·03	79·77	79·56	80·86
May	81·06	80·80	80·67	80·49	*80·28*	80·54	81·15	81·81	82·25	82·81	83·37	83·72	83·68	83·79	83·80	83·92	83·82	*83·94*	83·73	83·34	82·71	82·22	81·88	81·64	81·31	82·40
June	83·93	83·66	83·37	83·09	*82·99*	83·72	84·44	85·27	85·79	86·44	86·67	87·12	87·35	87·35	*87·61*	87·52	87·47	87·20	86·84	86·39	85·77	85·14	84·79	84·30	83·94	85·59
July	86·57	86·45	86·27	86·06	*86·01*	86·32	86·90	87·50	88·14	88·62	89·02	89·34	*89·51*	89·22	89·30	89·37	89·32	89·14	88·96	88·47	87·85	87·29	86·90	86·71	86·63	87·88
Aug.	85·52	85·34	85·12	84·95	*84·69*	*84·69*	85·03	86·06	86·86	87·42	87·76	88·20	*88·33*	88·23	88·24	88·24	88·07	87·87	87·50	86·90	86·40	86·10	85·78	85·64	85·35	86·62
Sept.	84·65	84·41	84·19	84·14	83·93	*83·78*	83·82	84·32	85·19	86·09	86·97	87·41	87·81	*87·81*	87·73	87·50	87·25	86·91	86·44	85·98	85·69	85·53	85·31	85·08	84·84	85·75
Oct.	83·07	82·92	82·75	82·65	82·43	82·35	*82·27*	82·37	82·91	83·87	84·71	85·38	85·87	86·18	*86·20*	86·07	85·67	85·20	84·62	84·16	83·79	83·52	83·26	83·21	83·02	83·97
Nov.	80·84	80·65	80·67	80·56	*80·49*	80·69	80·63	80·65	80·64	80·80	81·18	81·53	81·90	82·07	*82·18*	82·03	81·67	81·57	81·53	81·34	81·21	81·14	81·05	80·94	80·78	81·16
Dec.	78·62	78·52	78·61	78·75	78·54	78·53	78·45	*78·40*	78·51	78·55	78·76	79·00	79·22	*79·46*	79·38	79·29	78·88	78·72	78·66	78·66	78·59	78·57	78·45	78·47	78·48	78·73
Annual	81·33	81·13	81·01	80·89	*80·75*	80·81	80·99	81·40	81·86	82·40	82·89	83·34	83·65	83·79	*83·82*	83·74	83·47	83·22	82·89	82·56	82·22	81·98	81·74	81·55	81·34	82·23

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0°. Add 0·16° to obtain temperature
in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

65 ABERDEEN: North-wall screen on tower: h_t (height of thermometer bulb above ground) = 12·5 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	82·0	72·9	78·3	77·0	73·7	74·9	85·0	73·8	76·7	86·0	79·8	83·3	79·8	*74·6*	*77·3*	87·2	82·3	84·5
2	*83·3*	78·4	*81·7*	78·1	74·7	76·4	78·2	74·1	*76·1*	85·8	77·5	81·6	80·7	74·7	77·5	86·8	82·0	84·6
3	78·4	73·3	75·6	77·0	73·6	75·0	82·7	75·1	79·2	82·8	77·6	79·7	81·8	75·0	77·7	86·4	80·3	83·5
4	76·6	73·3	75·1	80·8	75·5	77·9	82·0	76·2	79·2	83·3	76·7	79·8	83·0	75·5	79·2	88·0	79·8	84·1
5	77·2	73·0	74·5	80·5	75·7	77·8	82·8	76·6	80·9	81·6	78·7	80·3	82·2	76·8	80·1	85·2	82·6	83·7
6	78·6	74·6	76·9	78·7	75·0	77·5	83·8	79·7	81·5	82·5	77·6	80·5	80·3	78·8	79·5	92·3	83·0	87·2
7	76·3	70·0	73·2	81·1	78·0	79·4	85·1	80·6	82·6	84·9	78·4	81·6	85·2	78·0	81·7	87·9	83·9	85·9
8	76·9	73·9	75·6	78·8	76·5	78·0	82·2	79·1	80·5	89·5	79·0	84·3	82·3	81·0	81·5	91·4	83·4	86·9
9	76·3	71·0	74·1	80·0	76·2	78·1	84·4	80·5	82·1	89·0	77·0	82·5	88·6	81·0	83·6	90·5	82·0	86·0
10	76·0	70·0	73·1	77·4	72·7	75·4	84·0	80·2	82·1	82·4	79·0	80·7	91·3	82·5	*87·3*	87·9	80·7	84·7
11	77·1	73·4	75·7	76·2	*71·0*	*73·6*	83·1	78·0	81·0	80·0	78·8	79·2	89·9	81·5	85·5	91·2	82·5	86·9
12	78·0	75·0	76·6	77·8	74·3	76·2	86·1	*73·2*	80·7	81·1	78·9	80·2	*91·5*	79·8	85·8	85·9	79·1	83·3
13	77·4	72·6	76·2	80·4	74·4	77·9	82·7	78·6	80·0	81·0	77·9	79·5	87·3	80·3	84·8	89·2	79·3	85·1
14	78·4	70·9	75·2	81·2	78·3	79·8	85·9	77·8	81·0	81·5	79·0	79·8	89·6	79·9	85·1	87·8	82·1	84·6
15	79·1	75·0	76·7	82·0	76·2	78·8	87·4	76·0	82·0	89·0	81·5	85·0	89·0	81·0	85·0	88·1	81·3	85·3
16	81·8	76·3	79·9	79·0	76·5	77·5	85·8	79·9	82·5	91·2	82·3	86·3	88·6	82·6	85·1	86·9	80·0	*83·0*
17	76·6	72·6	74·1	82·1	76·6	79·0	84·8	80·0	82·0	89·8	82·0	86·2	87·6	79·9	83·8	89·2	81·1	85·8
18	75·6	73·0	74·4	86·0	80·6	83·6	83·3	79·3	81·3	*91·4*	81·7	*86·4*	84·7	77·5	81·7	*94·7*	85·2	*90·0*
19	74·1	67·4	70·6	84·5	79·6	81·6	84·1	80·2	81·6	89·3	78·8	84·9	83·3	79·8	81·6	92·2	82·7	87·6
20	73·7	66·3	69·9	82·4	78·0	80·5	84·7	79·0	81·7	87·0	79·5	83·3	83·7	79·7	81·7	86·9	84·2	85·7
21	75·3	71·4	73·2	83·3	78·0	81·0	85·3	80·4	82·5	82·6	77·7	80·0	85·6	81·5	82·7	92·0	85·1	88·3
22	73·1	65·9	70·6	83·0	78·4	81·0	87·0	81·3	*83·4*	82·3	76·7	79·3	85·2	81·9	83·4	92·0	85·3	88·3
23	72·6	*63·0*	*67·5*	81·7	74·9	78·1	*90·5*	79·8	83·3	81·6	75·0	78·7	84·3	80·9	82·4	88·7	85·1	86·5
24	73·7	66·4	71·1	81·1	75·9	78·8	81·7	79·3	80·4	86·0	77·8	81·4	83·8	79·2	81·7	90·9	84·4	87·3
25	69·8	65·7	67·8	83·5	78·6	81·3	83·4	77·5	80·3	80·3	76·5	79·2	83·1	80·7	81·9	89·5	81·3	86·0
26	71·0	66·7	69·4	85·5	78·0	82·6	84·1	74·4	79·8	83·0	76·4	79·4	82·9	79·0	81·2	87·8	82·7	84·9
27	74·9	67·7	71·3	*88·1*	81·0	*84·2*	83·0	74·8	79·8	80·0	73·7	76·6	83·5	79·0	81·4	85·4	82·3	83·6
28	75·0	67·5	72·3	86·3	79·8	82·7	81·9	75·6	79·5	81·1	73·4	76·9	84·4	80·2	82·4	85·9	81·8	84·0
29	73·6	64·2	69·1				85·9	78·5	82·0	76·8	72·7	*74·6*	86·0	81·0	82·7	88·2	*78·7*	85·0
30	79·9	73·3	75·7				83·3	77·9	80·2	78·7	*71·9*	74·9	88·3	80·1	84·3	88·2	83·3	85·8
31	79·2	73·6	75·9				86·3	78·1	82·9				87·0	81·9	84·6			
Mean	76·5	70·9	73·9	81·2	76·5	78·9	84·2	77·9	80·9	84·1	77·8	80·9	85·3	79·5	82·4	88·8	82·3	85·6

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	87·1	81·2	84·6	91·4	84·2	86·4	87·8	*77·0*	83·6	90·0	82·8	*87·0*	85·1	83·4	84·4	82·4	78·8	81·1
2	86·0	82·8	*84·5*	88·1	81·6	85·4	89·6	80·0	85·5	89·7	82·2	85·8	84·8	83·8	84·5	*84·0*	78·7	81·5
3	89·0	*79·4*	85·5	*94·4*	83·9	89·6	89·7	84·5	87·0	*91·0*	79·1	84·5	84·3	83·4	84·0	79·6	75·4	78·0
4	94·0	87·5	90·7	94·2	86·5	*90·7*	90·3	83·1	86·2	87·4	82·0	84·6	85·4	83·9	*84·7*	80·7	73·5	77·5
5	*98·3*	88·0	*93·4*	87·3	85·0	86·2	86·1	82·4	84·4	89·0	82·2	84·9	85·2	84·2	84·7	79·0	75·2	76·8
6	93·7	87·9	91·1	85·1	82·4	83·6	89·1	79·9	84·4	87·7	81·8	84·5	85·4	79·5	83·3	76·0	72·7	74·9
7	91·2	85·4	87·3	88·3	84·4	86·0	87·9	80·4	84·8	85·9	77·9	82·5	*86·5*	78·6	83·1	81·7	73·6	79·3
8	90·0	85·6	87·6	88·9	84·7	86·6	89·3	83·5	86·3	89·2	81·6	85·8	84·7	80·0	82·4	80·7	75·6	78·3
9	88·5	85·9	87·0	88·8	81·2	85·5	88·3	80·6	85·2	87·0	83·7	85·4	81·9	79·8	80·5	80·7	75·2	77·4
10	91·4	86·0	87·9	87·9	81·6	85·3	88·5	83·6	86·8	84·3	80·2	82·5	82·0	79·4	80·5	81·0	76·7	79·2
11	87·8	86·4	87·0	88·2	82·0	86·0	89·7	86·6	88·1	83·3	79·1	*81·2*	81·0	76·1	79·5	81·0	75·1	77·5
12	91·3	85·6	87·8	88·0	85·3	86·5	91·2	86·9	*89·3*	85·2	77·5	81·7	78·8	*73·2*	*75·7*	82·8	75·9	80·9
13	88·1	84·9	86·5	86·9	83·9	85·6	88·5	85·5	87·1	86·5	79·2	82·7	82·5	74·8	79·1	83·0	75·7	78·2
14	88·5	85·2	86·7	91·3	85·8	88·0	85·5	84·5	86·3	88·6	79·7	84·8	83·1	80·8	82·1	78·8	73·1	76·0
15	90·8	85·3	87·8	88·3	86·0	87·5	89·6	84·4	87·1	88·1	82·9	84·8	82·9	76·8	81·0	79·0	76·1	77·7
16	89·5	87·2	88·3	88·3	85·6	87·0	86·2	85·1	85·8	89·4	84·8	86·6	80·2	75·1	77·1	82·9	78·1	81·3
17	91·4	84·9	88·2	90·3	85·6	87·7	*92·2*	85·9	88·5	86·8	83·3	85·0	77·4	73·9	76·0	83·0	79·9	81·4
18	90·0	85·6	87·7	88·0	84·9	86·1	87·3	85·1	86·4	87·3	78·2	82·5	82·9	76·7	81·6	83·0	80·2	*82·0*
19	88·1	86·1	86·9	87·1	83·9	85·3	90·0	85·7	87·3	85·5	*76·4*	82·2	82·6	80·9	81·8	82·4	76·5	80·5
20	90·2	86·2	88·3	87·3	83·0	85·0	88·0	82·4	85·3	85·4	81·7	83·7	82·7	80·7	81·7	78·6	73·5	76·5
21	93·8	87·1	89·6	87·0	82·6	85·3	87·3	81·4	84·8	86·1	83·7	85·2	81·8	77·3	80·1	80·6	*71·3*	*74·7*
22	91·9	85·9	88·6	88·1	83·7	86·2	86·6	83·4	84·9	86·3	82·0	84·6	83·3	79·6	81·7	81·0	79·8	80·6
23	95·7	86·9	91·3	89·6	80·2	85·7	86·8	82·4	84·6	85·1	79·8	83·2	83·3	81·8	82·7	81·4	79·1	80·6
24	90·7	86·4	88·2	93·3	85·0	89·5	85·8	82·3	84·1	85·9	79·4	83·5	81·9	78·9	80·9	81·6	79·9	81·1
25	90·1	85·8	87·7	91·9	85·0	88·2	85·5	81·5	*83·0*	85·0	81·5	82·9	82·8	77·8	80·3	81·7	79·9	81·1
26	88·7	83·4	86·1	90·1	83·4	87·5	85·3	81·7	84·6	83·5	80·3	81·7	80·5	75·8	77·3	81·6	80·5	81·2
27	87·8	82·7	85·6	93·0	86·1	89·4	86·1	82·2	83·8	83·1	80·4	81·8	83·4	76·7	80·2	81·0	75·4	78·6
28	89·2	82·2	86·5	88·6	86·6	87·4	86·8	81·8	83·9	84·8	80·9	83·4	82·1	78·2	80·4	79·1	74·4	77·4
29	95·2	86·9	90·3	91·9	85·0	87·9	88·4	82·0	85·5	85·2	84·3	84·8	84·3	80·1	82·0	78·9	75·0	77·2
30	92·3	85·2	88·4	86·9	81·7	85·0	91·9	85·1	88·0	87·5	81·3	84·5	83·6	78·9	81·6	76·7	73·8	75·2
31	88·8	85·0	87·2	87·5	*78·4*	*83·2*				86·4	81·3	84·9				78·8	74·1	77·1
Mean	90·6	85·3	87·9	89·2	83·8	86·6	88·3	83·0	85·8	86·7	81·0	84·0	82·9	79·0	81·2	80·7	76·2	78·7
									Annual	84·9	79·5	82·2						

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

66 ABERDEEN: North-wall screen on tower: h_t = 12·5 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	76·5	6·8	88·4	6·2	65·6	5·2	61·9	7·8	63·2	*5·3*	75·1	10·2	83·4	11·4	87·2	13·4	79·8	10·2	78·5	12·5	94·5	12·7	83·1	9·0
2	69·6	*7·8*	81·5	6·4	61·4	*4·7*	*55·3*	6·2	76·0	6·4	75·3	10·3	72·5	*9·8*	92·1	13·3	85·5	12·4	78·7	11·6	92·7	12·6	80·8	9·0
3	81·8	6·0	78·5	5·5	63·0	6·0	58·1	5·7	84·4	7·2	86·1	10·9	77·0	11·2	82·8	15·6	83·8	13·4	80·5	10·9	*95·6*	12·6	70·6	6·2
4	78·4	5·6	73·9	6·4	76·9	7·3	66·7	6·6	73·0	6·9	78·6	10·4	81·0	16·4	74·4	15·1	82·9	12·6	86·6	11·8	95·6	*13·1*	81·1	6·8
5	77·5	5·3	81·4	7·0	79·0	8·4	83·7	8·6	74·9	7·6	90·4	11·6	74·3	*17·8*	85·6	13·0	73·8	9·9	86·5	12·0	91·3	12·6	74·7	6·0
6	71·0	5·7	80·0	6·7	72·6	8·1	84·1	8·7	92·2	8·9	77·4	12·5	70·2	14·6	84·4	10·8	86·6	11·7	74·8	10·2	87·5	11·0	85·4	6·0
7	79·9	5·0	73·9	7·1	74·2	8·9	83·7	9·4	90·9	10·2	82·2	12·2	82·5	13·4	92·9	13·9	89·5	12·4	78·1	9·3	82·1	10·1	75·0	7·2
8	75·7	5·6	77·9	6·8	65·7	6·8	68·3	9·1	*96·3*	10·7	68·6	10·9	81·4	13·5	91·2	14·2	89·7	13·7	*69·0*	10·2	68·5	8·1	76·4	6·8
9	82·9	5·5	73·2	6·4	68·8	8·0	74·3	8·8	88·1	11·3	59·4	8·9	89·2	14·3	89·3	13·0	87·4	12·4	80·1	11·5	91·2	9·5	88·1	7·4
10	86·0	5·3	75·0	5·5	63·6	7·4	90·0	9·5	69·0	11·2	64·7	8·9	89·5	15·2	88·8	12·7	89·5	14·1	84·2	10·0	77·6	8·0	82·4	7·8
11	80·2	6·0	79·3	*5·1*	69·3	7·4	82·5	7·8	80·4	11·7	74·3	11·8	95·5	15·1	86·8	13·0	93·2	16·0	72·0	*7·8*	65·5	6·3	83·4	7·0
12	73·9	5·8	92·0	7·1	76·4	8·0	*94·2*	9·6	80·3	*11·9*	72·7	9·1	90·4	15·2	86·1	13·3	88·0	*16·3*	75·8	8·5	78·9	*5·9*	80·3	8·6
13	84·1	6·5	72·0	6·2	*92·1*	9·2	91·1	8·8	80·5	11·1	65·4	9·2	92·4	14·3	92·4	13·5	84·4	13·6	76·1	9·2	82·5	7·8	*68·9*	6·1
14	84·3	6·0	72·5	7·1	89·6	9·6	92·4	9·1	62·2	8·8	60·9	8·3	*96·5*	15·1	91·1	15·5	77·4	11·8	78·7	10·9	77·5	9·0	71·3	*5·4*
15	89·8	7·2	85·2	7·9	69·3	8·0	82·9	*11·6*	*59·4*	8·3	64·4	9·2	87·4	14·7	*95·7*	*15·8*	72·7	11·7	87·2	12·1	77·2	8·3	85·4	7·3
16	*68·3*	6·8	85·4	7·2	64·7	7·7	71·3	10·9	73·6	10·4	*57·2*	*7·0*	88·7	15·4	91·8	14·7	96·1	14·2	77·9	12·1	85·7	7·0	*92·9*	*10·2*
17	80·6	5·3	*92·5*	8·6	69·2	7·9	70·0	10·6	65·6	8·5	65·5	9·7	74·9	12·9	89·7	15·0	89·7	15·8	88·7	12·4	85·3	6·5	86·7	9·6
18	86·5	5·8	86·8	*11·1*	81·9	9·0	62·2	9·6	73·6	8·3	65·1	12·6	85·3	14·3	82·4	12·4	*96·8*	14·9	89·9	10·7	74·5	8·3	81·3	9·3
19	75·7	3·9	88·2	9·9	85·1	9·5	59·6	8·3	76·3	8·5	73·3	12·2	94·1	14·9	75·4	10·8	91·2	14·9	84·0	9·8	81·2	9·2	88·1	9·1
20	75·7	3·7	66·5	6·9	*54·9*	6·2	68·3	8·6	76·8	8·6	90·0	13·2	83·8	14·6	73·5	10·3	81·3	11·6	90·9	11·7	80·6	9·1	81·9	6·4
21	73·4	4·5	71·8	7·7	79·0	9·4	66·6	6·7	94·6	11·4	78·6	13·7	75·9	14·3	71·9	10·3	76·2	10·5	*98·2*	*14·0*	89·8	9·1	87·2	6·0
22	68·6	*3·5*	63·1	6·8	78·0	*9·8*	73·8	7·0	81·7	11·3	77·6	13·5	77·5	13·7	79·7	12·1	73·0	10·2	87·6	12·0	91·2	10·3	74·5	7·8
23	87·6	3·6	64·3	5·7	70·2	8·8	71·6	6·6	74·2	8·8	*91·4*	*14·1*	69·1	14·5	83·2	12·2	74·4	10·2	88·4	11·0	90·4	10·9	83·9	8·8
24	87·3	4·6	72·6	6·7	87·9	9·1	72·8	8·0	73·8	8·3	81·3	13·3	70·9	12·3	*64·3*	12·1	72·4	9·6	89·5	11·4	84·0	9·0	87·6	9·5
25	89·9	3·7	65·2	7·1	87·0	8·9	79·3	7·5	87·2	9·9	79·3	11·9	*60·5*	10·1	64·9	11·2	71·0	8·7	86·1	10·5	84·7	8·7	91·6	9·9
26	*95·5*	4·5	*61·5*	7·4	70·7	7·0	80·0	7·7	83·0	9·0	79·4	11·1	75·3	11·4	74·6	12·3	73·9	10·1	89·9	10·1	78·4	6·5	88·2	9·6
27	81·9	4·4	68·0	9·0	80·6	8·0	68·1	5·4	89·6	9·9	86·0	11·0	72·7	10·6	75·6	14·1	*70·9*	*9·2*	84·4	9·6	76·2	7·7	78·9	7·2
28	83·9	4·9	75·7	9·1	87·2	8·4	70·9	5·7	88·2	10·4	85·9	11·3	79·6	12·3	94·2	15·5	75·5	9·8	88·8	11·2	*62·3*	6·4	80·0	6·7
29	84·4	3·9			82·6	9·5	75·8	*5·2*	85·8	10·3	83·4	11·7	75·1	14·8	85·6	14·5	73·9	10·7	96·4	13·3	68·8	7·9	86·7	7·2
30	89·4	6·6			60·5	6·1	82·7	5·8	70·7	9·5	79·7	11·8	80·9	14·2	72·3	*10·1*	75·4	12·9	93·1	12·6	77·5	8·7	92·5	6·6
31	79·3	6·0			74·8	9·1			74·9	10·2			79·6	12·9	81·7	10·2			93·2	13·0			82·4	6·7
Mean*	80·7	5·3	76·7	7·2	74·3	8·0	74·8	8·0	78·7	9·4	75·6	11·1	80·9	13·7	83·3	13·0	81·7	12·2	84·3	11·1	82·3	9·1	82·3	7·7

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

67 ABERDEEN: h_t = 12·5 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	81·4	81·6	82·3	82·7	82·2	82·7	83·4	*83·5*	82·9	81·2	80·8	79·1	78·4	78·6	77·5	*76·8*	77·4	79·7	79·8	80·7	80·8	80·4	80·8	80·7	82·1	80·7
Feb.	82·1	*84·1*	83·6	81·4	82·1	81·9	80·9	80·7	79·3	76·6	75·3	72·1	69·0	*67·0*	67·3	67·8	69·7	72·3	75·7	77·3	76·6	78·0	79·3	80·6	81·1	76·7
Mar.	76·3	77·1	78·4	79·5	79·0	79·8	*80·0*	79·3	79·3	76·3	73·3	70·6	67·2	*64·3*	65·0	66·0	68·5	70·4	73·3	74·0	75·5	76·2	76·5	76·5	76·2	74·3
Apr.	78·6	78·9	80·4	80·8	81·3	*82·3*	81·6	78·4	74·5	71·6	69·8	68·2	68·3	66·2	*65·4*	66·5	67·4	69·1	71·0	75·7	77·9	79·7	79·5	80·6	79·1	74·8
May	84·5	85·2	85·5	86·2	*87·0*	86·0	84·2	81·2	79·3	76·2	74·9	74·3	73·8	74·0	72·8	71·9	72·2	*71·7*	72·3	74·2	77·3	79·8	82·0	82·9	84·7	78·7
June	83·1	83·4	84·4	84·9	*85·1*	82·0	79·7	75·7	73·4	70·8	71·1	68·8	69·4	68·2	66·8	*66·6*	67·7	69·5	71·8	73·8	76·9	79·6	80·8	81·9	83·1	75·6
July	87·7	86·0	86·6	87·8	87·5	85·8	84·4	81·5	78·5	77·4	75·4	73·8	*73·3*	75·3	75·7	74·7	75·3	76·8	77·8	79·3	82·4	84·5	86·5	87·0	*87·9*	80·9
Aug.	88·7	88·0	88·8	88·5	*89·0*	88·9	87·9	84·6	81·6	79·6	78·3	76·9	*76·5*	78·2	78·4	78·2	78·1	78·6	79·5	82·4	85·2	86·8	88·0	87·9	88·7	83·3
Sept.	85·3	85·5	86·5	86·1	86·8	87·2	87·5	*87·6*	84·4	81·9	78·4	76·0	73·9	*73·4*	74·0	75·1	76·1	77·7	81·1	83·5	83·7	83·7	84·5	84·6	85·0	81·7
Oct.	87·1	88·0	88·1	88·5	*88·6*	88·2	88·4	87·9	86·0	83·8	81·1	78·6	77·8	76·9	*76·3*	78·3	80·3	82·5	85·3	85·4	85·7	86·5	87·5	86·7	87·6	84·3
Nov.	85·2	84·7	84·1	*85·2*	85·0	85·1	84·5	84·1	84·3	83·2	82·4	81·4	80·0	79·5	*78·3*	*78·3*	79·9	80·4	79·8	81·1	82·5	82·2	81·7	82·4	84·2	82·3
Dec.	83·2	83·5	83·1	83·1	84·8	84·3	84·9	*85·1*	84·6	83·7	82·7	82·1	81·3	*79·2*	80·0	79·9	80·1	80·4	81·3	80·5	81·5	81·7	81·9	82·4	83·6	82·3
Annual	83·6	83·8	84·3	84·6	*84·9*	84·5	83·9	82·5	80·7	78·5	76·9	75·2	74·1	73·4	*73·1*	73·3	74·4	75·8	77·4	79·0	80·5	81·6	82·4	82·8	83·6	79·6

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

68 ABERDEEN: h_t = 12·5 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·2	5·1	5·1	5·1	*5·1*	5·1	5·2	5·3	5·2	5·2	5·2	5·2	5·3	*5·5*	5·4	5·4	5·3	5·3	5·3	5·4	5·4	5·3	5·4	5·3	5·2	5·3
Feb.	7·2	7·3	*7·4*	7·3	7·3	7·2	7·0	7·0	6·9	*6·9*	7·0	7·0	7·0	7·0	7·0	7·0	7·0	7·0	7·1	7·1	7·0	7·2	7·2	7·2	7·3	7·1
Mar.	7·7	7·7	7·7	7·6	7·5	7·5	*7·5*	7·5	7·8	8·0	8·1	*8·3*	8·2	8·0	8·0	8·0	8·2	8·2	8·2	8·1	8·1	8·1	8·0	7·9	7·8	7·9
Apr.	7·7	7·8	7·7	7·7	*7·6*	7·6	7·6	7·8	7·8	7·8	8·0	8·0	8·2	8·1	8·0	8·1	8·0	8·0	8·0	*8·2*	8·1	8·2	8·0	7·9	7·7	7·9
May	9·2	9·0	9·0	8·9	*8·9*	8·9	9·1	9·2	9·3	9·2	9·4	9·6	9·5	*9·6*	9·4	9·4	9·4	9·4	9·3	9·3	9·3	9·3	9·3	9·3	9·3	9·3
June	11·0	10·7	10·6	10·5	*10·4*	10·6	10·8	10·8	10·8	10·9	11·1	11·1	11·3	11·2	11·1	11·0	11·1	11·3	*11·4*	11·3	11·4	11·3	11·2	11·0	10·9	11·0
July	13·6	13·3	13·2	13·2	*13·1*	13·1	13·4	13·5	13·5	13·7	13·7	13·7	13·8	13·9	14·0	13·9	14·0	14·1	*14·1*	13·9	13·9	13·8	13·7	13·6	13·7	13·7
Aug.	13·0	12·6	12·6	12·4	12·2	*12·2*	12·4	12·7	12·9	13·1	13·2	13·3	13·3	13·5	*13·6*	13·5	13·4	13·3	13·1	13·1	13·1	13·1	13·0	12·9	12·7	13·0
Sept.	11·7	11·5	11·5	11·4	11·4	*11·3*	11·4	11·7	12·0	12·3	12·5	12·5	12·4	12·4	12·4	12·4	12·4	12·3	*12·5*	12·5	12·3	12·2	12·1	11·9	11·8	12·1
Oct.	10·7	10·8	10·6	10·6	10·5	10·4	*10·3*	10·4	10·5	10·9	11·2	11·3	11·6	11·7	11·6	*11·8*	11·8	11·7	11·7	11·3	11·1	11·0	10·9	10·8	10·8	11·0
Nov.	9·0	8·9	8·8	8·9	8·8	8·9	8·8	8·8	8·8	8·8	8·9	9·1	9·1	9·2	9·1	9·0	9·0	9·0	8·9	8·9	9·0	8·9	*8·8*	8·8	8·9	8·9
Dec.	7·5	7·6	7·6	7·6	7·7	7·6	7·7	7·6	7·7	7·6	7·6	7·7	7·7	7·6	7·7	7·6	7·4	7·4	7·4	*7·4*	7·4	7·4	7·4	7·4	7·5	7·6
Annual	9·3	9·1	9·1	9·0	*9·0*	9·0	9·0	9·1	9·2	9·3	9·4	9·4	*9·5*	9·5	9·5	9·5	9·4	9·4	9·4	9·4	9·4	9·4	9·3	9·2	9·2	9·3

* Mean of values, 1,2,.....23, ½(0 + 24).

RAINFALL

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

69 ABERDEEN: h_r (height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 24·1 m. + 0·6 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	*12·0*	*9·9*	(4)	1·4	1·2	*11*	...	...	...	...	...	...	...	...	...
2	3·0	1·1	7	0·3	0·2	(1)	...	...	...	...	...	...	4·5	2·7	10	1·3	1·8	(4)
3	7·8	6·7	2	4·4	1·9	(5)	0·2	0·4	...	...	...	...	8·5	5·0	20	2·6	3·4	(5)
4	7·2	2·3	(10)	14·1	7·6	(4)	1·2	1·0	(2)	...	...	...	0·1	0·1	(3)	5·2	2·7	14
5	2·0	1·6	(1)	0·2	0·5	...	2·1	2·5	(2)	0·6	1·9	(1)	...	...	...	0·3	0·8	(2)
6	0·3	0·2	(1)	1·4	1·8	(1)	0·1	0·3	...	...	...	...	12·4	*11·6*	*4*	6·5	5·9	(10)
7	6·1	2·6	*(15)*	...	...	...	0·1	0·3	...	...	...	...	...	...	...	6·5	2·1	22
8	10·5	3·8	(12)	1·4	2·2	(4)	...	...	...	...	...	...	9·2	4·3	28	5·4	1·2	*(60)*
9	3·7	1·6	*(15)*	2·0	2·8	(2)	...	...	...	...	...	...	0·9	0·9	4	0·9	0·2	23
10	2·9	1·2	(8)	2·3	2·1	(2)	...	...	...	0·2	0·8	(1)	...	...	...	...	...	...
11	0·2	0·3	(1)	...	...	...	...	...	...	1·5	4·6	(1)	4·1	1·3	13	0·1	0·1	(1)
12	...	...	...	8·1	5·2	*9*	1·9	2·7	(2)	0·2	0·3	(1)	...	...	...	0·7	0·7	13
13	...	...	...	...	...	...	0·2	0·3	(1)	0·1	0·5	...	8·0	3·4	7	1·4	1·0	4
14	0·2	0·2	...	0·6	0·8	(1)	0·2	0·4	...	5·4	4·9	7	0·8	0·3	12	...	...	...
15	2·7	3·7	(1)	...	...	...	0·2	0·2	(1)	0·1	0·1	...	...	...	...	2·8	1·4	43
16	...	...	...	0·9	0·7	(3)	...	...	...	...	...	...	5·2	2·6	14	...	...	...
17	5·1	6·1	(4)	1·7	1·6	3	...	...	...	...	...	...	1·1	1·6	(4)	...	...	...
18	*29·1*	*15·7*	(6)	...	...	...	0·4	0·6	(1)	...	...	...	...	...	...	...	...	...
19	4·5	2·6	(4)	...	...	...	2·3	3·6	(2)	...	...	...	...	...	...	...	...	...
20	3·1	1·2	(6)	...	...	...	...	...	...	...	...	...	0·2	0·4	(1)	...	...	...
21	1·7	1·4	(2)	...	...	...	0·5	0·6	(2)	1·3	1·5	(4)	*21·1*	6·3	*58*	...	...	...
22	...	...	...	...	...	...	...	...	...	1·0	1·0	10	0·3	0·3	(1)	...	...	...
23	2·7	1·9	(6)	...	...	...	...	...	...	...	...	...	...	...	...	3·5	3·1	10
24	1·8	1·8	(7)	...	...	...	...	...	...	0·7	3·2	(1)	...	...	...	*12·1*	4·2	40
25	2·3	1·7	(3)	0·2	0·5	...	...	...	...	3·1	*8·9*	(1)	7·3	8·6	(13)	3·7	2·7	13
26	6·6	3·2	(6)	0·4	0·2	(2)	...	...	...	2·9	1·6	13	1·0	2·1	(1)	5·2	*6·5*	4
27	1·9	0·8	(6)	...	...	...	*4·6*	*4·0*	(5)	0·1	0·1	...	4·8	5·9	(5)	5·6	5·7	7
28	0·1	0·2	...	...	...	...	0·3	0·3	(1)	6·2	2·9	*16*	7·0	3·7	(12)	...	...	...
29	2·6	3·0	(1)				0·4	0·7	(2)	3·1	3·0	(14)	...	...	...	...	...	...
30	12·5	8·9	(10)				...	...	...	*7·1*	6·8	7	2·7	0·4	31	...	...	...
31	7·6	5·4	(5)				...	...	...				2·2	1·6	(5)			
Total	128·2	79·2	-	50·0	38·0	-	16·1	19·1	-	33·6	42·1	-	101·4	63·1	-	63·8	43·5	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	1·1	0·5	10	0·2	0·3	...	...	...	...	...	...	...	1·3	2·2	1	...	...	...
2	0·3	0·5	...	...	...	...	...	...	...	...	...	...	0·7	2·6	2	0·2	0·2	4
3	...	...	...	...	...	...	...	...	...	...	...	...	3·8	*8·1*	6	0·4	1·2	1
4	...	...	...	0·1	0·2	...	...	...	...	...	...	...	1·0	1·8	1	11·0	5·7	13
5	...	...	...	2·9	5·0	3	...	...	...	...	...	...	...	...	...	1·2	0·7	17
6	...	...	...	25·8	*12·5*	*72*	...	...	...	...	...	...	...	...	...	0·4	0·4	...
7	*19·8*	*8·1*	24	13·2	5·2	68	...	...	...	...	...	...	0·3	0·5	1	0·1	0·3	...
8	0·7	1·4	2	...	...	...	...	...	...	...	...	...	...	...	...	8·6	9·0	11
9	7·0	3·4	3	...	...	...	...	...	...	0·3	0·8	1	1·3	2·1	14	8·7	6·0	7
10	4·4	4·1	3	...	...	...	0·4	1·8	(1)	11·0	13·1	7	3·9	2·6	18	...	...	...
11	16·2	*8·1*	84	...	...	...	0·5	1·1	(1)	...	...	...	2·5	1·1	18	1·6	2·5	3
12	...	...	...	...	...	...	5·6	1·0	*110*	...	...	...	...	...	...	0·2	0·5	...
13	0·1	0·3	...	0·1	0·5	...	1·3	2·3	(2)	...	...	...	0·1	0·1	...	0·9	0·6	5
14	4·6	4·6	37	0·2	0·7	...	3·1	4·8	7	0·2	0·3	1	1·1	0·5	*22*	...	...	...
15	0·3	0·6	...	*32·8*	11·8	23	...	...	...	0·6	0·7	8	1·8	1·1	21	1·1	3·4	1
16	11·0	2·6	*156*	15·9	6·3	61	9·1	9·2	7	...	...	...	1·6	1·5	11	13·8	*11·2*	9
17	...	...	...	4·6	7·6	(2)	6·5	7·5	12	...	...	...	...	...	...	11·8	5·8	17
18	...	...	...	...	...	...	0·2	1·3	...	...	...	...	...	...	...	1·2	1·3	5
19	2·2	2·4	10	...	...	...	9·4	*10·3*	30	...	...	...	1·1	1·4	5	9·9	8·6	11
20	1·2	0·5	15	...	...	...	8·3	2·2	95	...	...	...	0·1	0·1	...	...	...	...
21	2·3	2·1	(3)	...	...	...	0·3	0·2	6	6·9	6·2	22	0·9	2·7	...	...	...	...
22	0·5	1·0	(3)	...	...	...	*13·5*	3·9	90	0·4	0·4	2	0·6	0·6	7	3·6	2·8	5
23	...	...	...	4·0	4·6	5	0·5	0·5	14	0·1	0·2	...	*6·4*	5·6	17	4·0	4·2	14
24	...	...	...	...	...	...	0·4	0·6	3	12·9	6·7	27	0·2	1·0	1	7·5	6·9	12
25	...	...	...	1·8	0·5	32	...	...	...	6·2	4·7	*85*	1·9	1·2	15	*14·6*	5·8	*34*
26	3·8	0·5	63	...	...	...	0·1	0·2	...	3·2	5·3	3	1·1	1·5	1	0·6	0·5	6
27	0·4	0·5	7	...	...	...	...	...	...	1·1	1·5	2	0·3	0·4	3	7·5	3·3	15
28	0·3	0·3	(2)	1·4	2·6	2	0·3	0·2	24	*52·0*	*16·6*	22	...	...	...	...	...	...
29	...	...	...	0·4	0·2	4	...	...	...	3·6	6·3	2	...	...	...	1·9	2·1	3
30	...	...	...	...	...	...	0·7	0·2	22	0·4	0·9	2	...	...	...	1·2	0·5	12
31	...	...	...	...	...	...				1·8	1·7	12				...	...	...
Total	76·2	41·5	-	103·4	58·0	-	60·2	47·3	-	100·7	65·4	-	32·0	38·7	-	112·0	83·5	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

70 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	5·7	5·9	7·2	7·5	7·7	6·1	8·8	2·1	3·6	2·1	3·4	2·5	6·2	7·3	3·9	3·8	2·7	3·5	4·8	6·4	2·6	7·9	7·2	*9·3*	128·2
Feb.	3·8	3·0	2·9	2·4	3·8	4·2	2·6	1·3	···	···	···	···	···	0·6	1·5	0·9	2·2	1·7	3·9	*5·7*	2·6	1·0	1·9	4·0	50·0
Mar.	0·6	0·4	0·4	0·1	0·3	0·2	0·1	0·6	0·7	···	0·3	1·0	1·0	0·2	0·9	1·1	*2·8*	2·7	0·6	0·2	0·9	0·6	0·3	0·1	16·1
Apr.	0·3	0·4	0·6	0·2	0·6	0·6	0·9	1·0	0·5	2·4	2·5	0·6	1·4	1·0	1·4	2·4	*3·8*	1·3	0·9	0·9	2·6	3·5	3·5	0·3	33·6
May	8·2	*9·4*	5·1	6·2	3·7	4·3	4·4	3·7	3·0	5·4	5·5	7·0	6·7	2·6	5·3	3·4	1·5	0·5	0·1	0·4	1·8	5·8	4·4	3·0	101·4
June	1·8	1·9	4·4	3·0	1·8	0·7	0·3	2·7	0·1	0·5	1·4	2·0	4·4	7·7	3·4	3·0	2·1	5·0	4·6	*7·8*	0·7	2·7	0·5	1·3	63·8
July	5·2	6·2	1·9	5·0	1·3	0·6	0·6	2·8	1·8	1·0	1·2	3·5	*8·0*	4·4	1·4	5·6	5·3	3·0	0·3	1·1	5·3	4·0	4·4	2·3	76·2
Aug.	9·7	1·4	2·8	4·5	6·0	4·6	3·2	2·0	0·4	0·5	···	1·0	1·8	3·1	7·6	*10·1*	1·5	4·3	6·5	9·8	4·9	4·9	8·1	4·7	103·4
Sept.	0·5	1·4	4·4	4·5	6·9	4·7	2·2	3·4	1·8	0·8	0·8	0·7	0·1	0·1	0·9	···	0·6	2·1	4·7	4·8	1·3	2·2	*7·6*	3·7	60·2
Oct.	0·6	0·8	2·0	2·1	2·0	1·1	1·1	2·6	2·9	4·0	4·5	4·5	5·9	4·5	8·2	6·4	1·6	4·4	6·7	8·6	*10·5*	7·4	4·8	3·5	100·7
Nov.	1·9	2·1	1·2	*2·8*	2·6	2·0	1·8	1·6	0·9	1·3	0·1	0·1	1·0	0·3	0·1	0·6	0·1	0·9	0·6	2·0	1·8	2·0	2·2	2·0	32·0
Dec.	7·1	*10·2*	8·8	5·5	3·5	5·2	6·9	6·3	6·1	8·3	6·7	1·4	1·4	1·4	0·8	1·3	1·5	3·6	2·7	1·6	3·7	4·8	8·2	5·0	112·0
Annual	45·4	43·1	41·7	43·8	40·2	34·3	32·9	30·1	*21·8*	26·3	26·4	24·3	37·9	33·2	35·4	38·6	25·7	33·0	36·4	49·3	38·7	46·8	*53·1*	39·2	877·6

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

71 ABERDEEN: h_r = 24·1 m. + 0·6 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	4·9	4·4	4·8	4·0	4·5	4·3	3·8	1·6	1·9	1·6	1·5	1·4	3·3	3·7	2·3	2·0	1·4	2·9	3·7	3·1	3·3	4·2	4·9	5·7	79·2
Feb.	3·0	2·6	2·2	2·0	2·2	2·3	2·5	1·5	···	···	···	···	···	0·4	1·2	0·7	1·3	1·5	3·5	*3·8*	2·2	1·0	1·8	2·3	38·0
Mar.	0·4	0·4	0·4	0·2	0·3	0·2	0·1	0·8	1·2	···	0·8	1·1	1·0	0·2	1·1	2·0	*2·3*	2·1	1·1	0·4	1·5	1·1	0·2	0·2	19·1
Apr.	1·0	1·2	1·6	1·0	1·5	1·5	2·3	3·3	1·2	1·7	1·2	0·7	1·3	0·7	1·4	2·3	1·9	2·5	0·8	1·8	3·3	*3·6*	3·2	1·1	42·1
May	2·2	3·5	3·7	3·7	2·7	3·2	3·6	*4·3*	2·1	3·1	2·3	2·5	2·8	1·9	3·1	2·4	1·0	0·8	0·2	0·4	1·6	3·7	4·2	4·1	63·1
June	3·2	3·0	2·4	2·8	1·6	1·5	0·9	1·3	0·2	0·5	1·1	1·3	2·0	2·7	2·0	1·7	0·9	2·3	3·1	*3·3*	1·1	1·0	1·0	2·6	43·5
July	3·3	*3·6*	2·0	1·8	2·1	1·7	0·7	1·7	2·0	0·8	0·6	1·0	2·1	1·7	0·7	1·2	2·2	1·0	0·6	1·1	2·7	2·9	2·0	2·0	41·5
Aug.	3·3	2·7	2·3	2·8	3·5	2·4	3·0	2·6	0·7	0·5	···	1·2	1·9	2·5	2·8	2·4	2·3	2·8	2·7	2·8	3·2	3·6	*3·8*	2·2	58·0
Sept.	1·5	1·1	3·1	3·6	3·6	3·0	2·4	2·8	2·3	1·3	1·1	0·5	0·2	0·2	0·3	···	0·5	1·4	1·9	3·0	1·7	2·9	4·1	*4·8*	47·3
Oct.	2·4	1·4	3·3	3·4	3·2	2·9	2·2	1·7	2·8	3·6	2·3	2·9	2·9	2·9	3·5	*4·3*	1·2	1·4	1·5	2·7	3·0	3·6	3·1	3·2	65·4
Nov.	2·7	2·6	2·0	1·5	1·9	*3·3*	2·0	1·7	1·9	1·3	0·6	0·2	1·9	0·4	0·1	0·6	0·3	1·1	1·7	1·9	2·0	2·4	2·4	2·2	38·7
Dec.	4·0	5·2	5·4	*6·4*	3·9	5·3	5·8	5·3	4·9	4·3	3·3	1·9	1·4	1·6	1·2	1·0	1·4	2·1	2·1	2·3	2·4	3·2	4·6	4·5	83·5
Annual	31·9	31·7	33·2	33·2	31·0	31·6	29·3	28·6	21·2	18·7	14·8	*14·7*	20·8	18·9	19·7	20·6	16·7	21·9	22·9	26·6	28·0	33·2	*35·3*	34·9	619·4

NOTES ON RAINFALL

72 ABERDEEN: 1945

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": No occasions
"Partial drought": No occasions
"Dry spells": September 23–October 9

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spells": No occasions
"Wet spells": No occasions

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	82	37	69	27	4

Continuous or Heavy Falls

The heaviest fall was 55 mm. in 24 hr. on October 28–29: of this amount, 27 mm. fell in five hours

Heavy Falls in short periods

On July 16, 3 mm. fell in 2 m.

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall was 156 mm./hr. on July 16.

73 ABERDEEN: h_s (height of recorder above ground) = 20·7 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	2·1	31	3·2	38	7·6	72	1·3	10	6·7	44	10·6	61	2·3	13	9·5	59	*12·0*	*86*	3·7	32	···	···	···	···
2	···	···	3·0	36	3·2	30	10·1	77	4·9	32	12·0	69	1·9	11	4·0	25	11·1	80	5·8	51	···	···	0·4	6
3	0·1	1	3·2	38	···	···	7·2	55	2·3	15	3·9	22	8·7	49	12·0	75	11·1	81	6·8	60	···	···	4·1	59
4	0·7	10	4·3	50	4·3	40	6·9	52	2·5	16	6·9	39	2·4	14	6·9	43	0·6	4	0·3	3	···	···	0·2	3
5	*4·2*	*62*	3·9	45	···	···	2·7	20	9·9	63	1·1	6	*13·1*	*74*	0·1	1	11·1	82	7·3	65	···	···	*5·6*	*81*
6	2·7	39	···	···	2·6	24	9·0	67	···	···	7·1	40	11·3	64	···	···	0·8	6	*10·1*	*91*	1·2	14	···	···
7	2·2	32	2·0	23	0·6	5	7·4	55	4·9	31	3·8	22	3·9	22	4·3	27	2·6	19	9·5	86	···	···	···	···
8	0·1	1	1·4	16	2·3	21	*11·5*	*85*	···	···	5·9	34	7·6	43	9·9	63	3·1	23	6·2	57	1·4	16	···	···
9	3·6	51	6·4	72	1·1	10	10·8	79	5·4	34	10·1	57	2·3	13	13·1	83	9·4	71	0·2	2	1·2	14	···	···
10	0·1	1	1·7	19	1·3	11	···	···	*13·1*	*81*	10·9	62	5·9	34	*13·7*	*88*	1·2	9	···	···	0·1	1	0·1	1
11	2·7	38	7·2	79	3·5	31	···	···	8·1	50	4·4	25	···	···	2·1	14	0·1	1	1·7	16	0·4	5	0·4	6
12	···	···	···	···	2·9	25	0·3	2	10·4	64	3·0	17	7·1	41	4·9	32	0·5	4	3·8	36	3·0	37	···	···
13	···	···	7·3	78	···	···	···	···	2·5	15	0·4	2	···	···	···	···	2·6	20	5·4	51	0·8	10	···	···
14	···	···	0·1	1	7·8	67	···	···	8·1	49	13·1	74	···	···	3·0	20	4·1	32	9·0	87	···	···	0·5	8
15	···	···	5·8	62	3·2	27	1·2	7	7·5	46	9·2	52	1·4	8	···	···	3·1	24	3·4	33	3·5	44	···	···
16	1·2	16	1·5	16	4·7	40	7·9	55	0·5	3	13·0	73	2·5	15	···	···	···	···	5·1	50	3·7	46	···	···
17	···	···	···	···	3·1	26	6·3	44	9·0	55	1·6	9	10·2	60	0·7	5	0·5	4	···	···	0·2	3	···	···
18	···	···	0·4	4	···	···	9·8	68	9·8	59	8·7	49	9·7	57	···	···	···	···	7·3	72	1·7	22	···	···
19	2·3	31	1·3	13	1·4	12	8·3	57	9·7	58	*15·8*	*89*	···	···	0·6	4	4·1	33	2·6	26	···	···	···	···
20	0·7	9	8·4	*86*	9·4	78	2·4	16	5·0	30	3·8	21	3·0	18	0·5	3	9·2	74	···	···	···	···	3·1	47
21	1·7	22	1·6	16	···	···	8·7	59	1·3	8	7·0	39	3·3	20	7·9	53	4·4	36	···	···	0·9	12	···	···
22	3·4	44	2·2	22	4·6	37	5·3	36	6·2	37	5·2	29	2·1	12	4·3	29	0·8	7	0·9	9	1·1	14	···	···
23	0·2	3	7·4	73	*10·4*	*85*	9·4	64	7·3	43	0·3	2	9·5	57	0·5	3	1·8	15	···	···	···	···	···	···
24	···	···	0·1	1	8·5	69	3·3	22	5·7	34	4·2	24	2·6	16	10·3	71	2·9	24	···	···	0·7	9	···	···
25	1·6	20	4·9	48	3·0	24	···	···	1·2	7	6·2	35	2·3	14	8·1	56	2·9	24	0·7	7	···	···	···	···
26	···	···	*8·9*	*86*	9·5	75	1·7	11	2·0	12	7·2	40	2·3	14	6·9	48	4·6	39	0·2	2	2·4	33	0·9	14
27	1·0	13	7·6	73	3·0	24	8·4	56	2·7	16	1·0	6	8·2	50	6·5	45	1·6	14	2·5	27	···	···	3·7	56
28	0·2	2	4·1	39	1·9	15	6·3	41	3·5	20	3·6	20	2·3	14	···	···	5·4	46	···	···	*3·9*	*54*	1·5	23
29	···	···			1·4	11	3·6	23	1·9	11	11·0	62	4·3	26	1·4	10	1·2	10	···	···	0·2	3	2·6	39
30	···	···			8·2	64	1·9	12	9·7	56	6·9	39	3·4	21	4·7	33	4·2	36	1·6	17	1·4	20	0·1	1
31	3·7	45			0·2	2			10·3	60			0·9	6	10·7	76			0·2	2			0·8	12
Mean	1·11	–	3·50	–	3·54	–	5·06	–	5·55	–	6·60	–	4·34	–	4·73	–	3·90	–	3·04	–	0·93	–	0·77	–
											Annual mean		3·58	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

74 ABERDEEN: h_s = 20·7 m. 1945

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	0·4	3·9	5·2	*7·7*	7·7	5·3	4·2	0·1	···	–	–	–	–	34·5	15
Feb.	–	–	–	···	1·6	7·2	11·1	13·1	*15·2*	14·0	12·1	14·0	7·7	1·9	···	–	–	–	97·9	37
Mar.	–	–	···	1·7	6·0	10·9	10·3	*13·1*	12·7	11·3	11·8	11·2	11·1	8·5	1·1	···	–	–	109·7	30
Apr.	–	···	3·2	9·5	13·3	13·6	*15·2*	13·9	13·0	13·6	13·7	11·9	10·0	11·4	7·0	2·4	···	–	151·7	36
May	···	2·6	7·9	10·0	11·5	12·3	13·0	14·0	*14·8*	12·7	13·0	14·6	11·7	12·2	11·4	7·4	3·0	···	172·1	34
June	0·6	9·4	9·9	12·3	14·3	12·2	10·5	11·4	12·5	12·0	14·9	15·3	*17·3*	14·4	12·7	11·6	6·1	0·5	197·9	37
July	0·1	4·6	7·2	9·2	11·5	12·2	*12·5*	12·2	10·7	8·6	9·4	8·1	9·3	7·3	6·8	2·3	2·5	···	134·5	25
Aug.	···	0·8	6·4	8·3	9·6	9·2	10·3	12·7	12·2	*13·8*	11·5	12·2	13·1	12·8	8·8	4·6	0·3	···	146·6	31
Sept.	–	–	···	3·8	8·6	9·9	11·7	12·7	*13·7*	12·1	11·1	12·1	9·6	7·2	3·9	0·6	–	–	117·0	31
Oct.	–	–	–	0·1	4·3	8·1	9·6	12·9	*13·0*	12·1	11·8	9·7	8·7	3·9	0·1	–	–	–	94·3	30
Nov.	–	–	–	–	···	0·2	1·6	4·4	*6·4*	5·4	5·1	3·9	0·8	···	–	–	–	–	27·8	12
Dec.	–	–	–	–	–	···	1·5	4·2	*6·1*	5·7	4·2	2·3	···	–	–	–	–	–	24·0	12
Annual	0·7	17·4	34·6	54·9	80·7	96·2	111·2	129·8	*138·0*	129·0	123·9	119·5	99·4	79·6	51·8	28·9	11·9	0·5	1308·0	29

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

75 ABERDEEN: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 24 m. + 13 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	2·3	9	3·5	16	*8·7*	*25*	5·8	22	*6·1*	18	5·3	16	3·5	13	2·8	11	2·6	9	1·0	6	1·2	8	3·3	14
2	3·8	18	5·1	16	4·8	15	3·4	15	4·1	15	4·6	15	5·0	16	1·5	6	2·0	9	0·9	5	2·5	10	4·9	16
3	4·6	21	3·5	18	4·0	15	4·9	18	2·5	12	1·7	8	3·3	15	1·5	8	3·6	12	1·1	4	3·9	13	3·1	13
4	7·4	23	3·6	18	3·5	13	3·8	15	2·5	9	1·9	9	3·4	16	2·4	15	2·1	11	*0·5*	4	1·8	8	3·8	20
5	3·5	14	2·7	11	5·2	19	2·3	8	3·9	13	2·7	10	2·9	12	2·4	10	1·5	6	2·1	7	1·9	7	6·1	18
6	3·6	17	2·9	13	5·6	15	2·2	7	3·6	13	4·5	14	3·5	12	*8·2*	*21*	*0·9*	4	4·2	16	*0·2*	4	2·9	14
7	7·6	25	4·3	15	5·7	15	4·1	13	*1·2*	5	2·7	9	*1·3*	8	4·8	18	1·9	6	1·9	9	3·0	12	5·3	19
8	7·1	23	3·3	12	3·1	14	2·3	10	2·0	7	3·2	14	2·1	9	1·9	6	1·1	7	3·0	13	*6·3*	17	7·9	23
9	3·1	15	3·7	20	3·3	13	1·6	8	2·6	10	4·5	15	2·9	11	*0·8*	5	1·4	7	3·8	15	3·4	13	2·0	17
10	3·4	10	2·0	14	3·2	13	1·6	8	3·9	15	3·0	9	2·0	11	1·3	6	4·2	15	2·8	15	2·3	11	3·3	10
11	2·6	10	*1·6*	7	1·9	11	3·7	12	1·3	7	4·0	13	2·1	7	1·3	4	4·3	14	1·2	5	2·3	12	3·9	14
12	1·8	8	2·9	13	1·6	10	2·4	8	2·0	10	5·6	*21*	1·8	9	1·6	8	3·8	21	2·2	9	1·7	5	4·4	18
13	*0·9*	8	2·8	14	1·2	8	2·1	9	3·5	17	4·7	18	2·1	9	1·3	5	4·9	19	1·3	7	2·7	10	7·1	25
14	2·4	10	3·0	20	*0·9*	5	5·7	21	4·9	17	*6·6*	20	2·3	11	1·2	6	3·8	13	2·4	17	3·2	10	1·9	7
15	1·3	8	2·0	13	2·1	11	3·7	13	4·5	*19*	5·5	19	1·7	8	2·6	12	3·3	13	0·7	4	2·3	11	*0·9*	7
16	4·5	22	2·5	9	4·1	16	4·1	15	3·9	18	5·1	15	3·2	12	6·7	16	1·3	6	1·6	10	1·0	6	1·7	10
17	4·7	28	3·3	14	2·6	9	3·6	14	3·9	12	3·2	16	3·7	13	4·2	10	1·3	10	1·0	7	1·0	3	4·7	17
18	*8·2*	*30*	3·4	16	3·0	16	3·2	12	2·5	9	4·8	17	3·9	13	4·3	13	1·1	7	0·5	6	4·3	13	8·0	*29*
19	5·9	17	3·4	14	4·0	16	2·6	12	4·0	11	2·5	11	3·1	11	3·2	11	1·9	13	2·6	12	3·2	11	4·6	21
20	5·0	18	3·4	17	6·0	23	3·5	13	3·5	10	2·3	8	3·0	14	2·0	7	2·6	15	2·1	8	1·1	8	1·9	8
21	7·1	18	4·5	20	4·2	16	*7·9*	23	1·5	9	2·9	10	2·3	12	1·7	6	3·8	14	1·5	12	0·4	3	1·6	9
22	2·8	11	2·6	17	4·2	16	6·2	17	4·3	18	1·7	11	3·4	11	2·5	10	*7·5*	*26*	1·7	9	1·1	9	8·1	21
23	1·1	5	2·3	9	4·4	14	2·5	7	4·1	13	*1·6*	7	2·8	14	2·8	12	5·6	16	1·4	10	4·6	13	*10·0*	22
24	1·1	6	*7·1*	*27*	2·7	9	*1·2*	6	2·7	8	2·3	9	1·9	10	4·5	15	6·2	19	3·3	18	2·3	9	7·3	20
25	1·8	5	4·7	19	1·9	9	2·1	8	1·3	7	1·8	9	1·8	8	4·8	17	3·6	14	3·4	14	2·9	13	3·1	18
26	3·6	8	4·3	21	1·5	7	1·8	9	1·7	7	3·5	14	3·4	10	2·5	11	2·7	15	2·2	9	3·8	16	4·0	16
27	3·7	14	4·1	19	2·8	16	4·6	16	3·1	13	3·9	13	4·7	17	2·1	11	2·4	9	2·1	9	2·4	14	2·8	16
28	1·9	9	5·2	20	2·3	11	6·1	18	2·8	13	1·9	6	2·4	8	1·6	7	3·5	11	*4·7*	*18*	4·2	*20*	3·0	15
29	2·6	14			2·8	11	7·5	20	1·8	11	2·5	12	*6·0*	*17*	1·9	11	1·2	5	2·3	8	2·2	11	3·7	14
30	4·3	17			4·2	19	6·9	*24*	2·4	12	2·3	10	4·1	13	1·7	8	1·8	8	0·7	5	1·1	10	1·3	5
31	4·7	18			5·7	20			4·1	15			4·7	14	2·0	8			2·7	13			3·2	13

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

76 ABERDEEN: h_a = 24 m. + 13 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	*4·3*	4·1	3·9	4·0	3·7	3·6	3·9	3·8	3·8	3·7	3·5	3·6	3·7	3·7	3·6	3·6	*3·5*	3·8	3·9	4·0	4·0	3·9	3·9	4·1	3·8
Feb.	3·0	3·1	3·3	3·2	2·9	2·7	*2·6*	2·7	2·8	3·2	3·8	4·2	4·2	4·3	*4·5*	4·3	3·9	3·4	3·5	3·7	4·1	3·8	3·5	3·1	3·5
Mar.	3·0	2·6	2·5	2·4	*2·3*	2·4	2·4	2·9	3·2	3·8	4·4	4·8	5·0	*5·3*	5·1	5·2	4·5	4·3	3·6	3·6	3·2	3·3	3·2	3·0	3·6
Apr.	3·0	3·0	3·1	3·1	3·2	3·2	3·3	3·7	4·1	4·5	4·7	4·7	4·8	*5·1*	5·0	4·8	4·5	4·0	3·9	3·4	3·1	2·9	*2·8*	*2·8*	3·8
May	2·4	2·4	2·4	2·4	2·5	*2·3*	2·6	3·0	3·4	3·5	3·9	3·8	3·9	4·0	*4·0*	3·9	3·8	3·5	3·5	3·0	2·7	2·4	2·5	2·5	3·1
June	*2·1*	2·2	2·3	2·4	2·4	2·9	3·3	3·5	3·9	4·2	4·3	4·6	*4·8*	4·6	4·8	4·7	4·5	4·1	3·6	3·1	2·7	2·4	2·5	2·3	3·4
July	2·2	2·2	*2·1*	2·2	2·1	2·2	2·6	3·2	3·6	3·9	4·0	4·1	*4·2*	4·1	4·1	4·2	3·9	3·5	3·2	2·7	2·5	2·2	2·1	2·2	3·0
Aug.	2·3	2·2	2·3	2·3	2·3	2·3	2·2	2·4	3·0	3·3	3·4	3·5	*3·6*	3·5	3·4	3·3	3·1	3·1	2·6	2·3	*2·1*	2·2	2·2	2·1	2·7
Sept.	2·4	2·3	2·3	2·2	2·5	2·3	2·2	*2·2*	2·6	3·1	3·4	4·0	4·1	*4·2*	4·1	3·8	3·6	3·2	3·0	2·6	2·6	2·7	2·7	2·5	2·9
Oct.	*1·4*	1·4	1·7	1·4	1·5	1·5	1·6	1·7	2·1	2·5	2·7	2·9	3·1	*3·2*	2·9	2·5	2·1	2·0	1·8	1·9	1·7	1·8	1·7	1·5	2·0
Nov.	2·3	2·3	*2·0*	2·0	2·3	2·3	2·4	2·3	2·6	2·7	2·7	2·9	*3·0*	2·8	2·6	2·6	2·3	2·3	2·2	2·4	2·5	2·8	2·6	2·4	2·5
Dec.	4·1	4·2	4·5	4·4	4·1	4·0	4·1	4·0	4·1	4·1	4·4	4·4	4·6	*4·7*	4·6	4·2	3·9	3·9	3·9	*3·8*	4·0	4·1	4·2	4·1	4·2
Annual	2·7	2·7	2·7	2·7	*2·6*	2·6	2·8	3·0	3·3	3·5	3·8	4·0	4·1	*4·1*	4·1	3·9	3·6	3·4	3·2	3·0	2·9	2·9	2·8	2·7	3·2

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

77 ABERDEEN: h_a = 24 m. + 13 m. 1945

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	4	11	170	414	149	0	300	14	17 1	30	18 18 30
Feb.	–	0	1	5	104	442	121	0	240	12	24 21	27	24 22 10
Mar.	–	0	1	8	146	427	163	0	320	13	1 14	25	1 15 45
Apr.	–	0	–	0	177	414	129	0	330	11	21 19	24	30 13 55
May	–	0	–	0	66	522	156	0	350	8	1 10	19	15 16 40
June	–	0	1	2	142	416	160	0	340	12	12 17	21	12 16 55
July	–	0	–	0	67	509	168	0	310	9	29 19	17	29 17 20
Aug.	–	0	1	2	71	425	246	0	320	11	6 16	21	6 11 5
Sept.	–	0	1	1	100	391	228	0	170	11	22 8	26	22 5 45
Oct.	–	0	–	0	41	352	351	0	300	9	14 10	18	28 18 15
Nov.	–	0	–	0	43	415	262	0	260	10	28 21	20	28 21 5
Dec.	–	0	2	6	232	347	159	0	160	13	18 12	29	18 13 10
Year	–	0	11	35	1359	5074	2292	0	300	14	Jan. 17 1	30	Jan. 18 18 30

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (1ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

78 ABERDEEN 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	74·9	77·5	73·7	76·2	77·9	76·9	79·8	79·1	79·2	80·7	84·9	83·1	87·3	85·1	88·4	86·9	87·4	87·1	85·8	85·9	83·8	84·1	79·7	81·9
2	74·9	77·5	73·7	76·2	77·8	77·1	79·8	79·1	79·5	80·5	85·1	83·1	86·9	85·1	88·6	86·9	87·2	87·0	85·9	85·8	83·9	84·1	79·9	81·8
3	75·3	77·5	73·7	76·1	76·6	77·1	79·9	79·2	79·7	80·5	85·2	83·1	86·5	85·1	88·8	86·9	87·3	87·0	85·6	85·9	84·1	84·1	79·8	81·7
4	75·2	77·4	73·5	76·1	76·9	77·2	79·7	79·3	79·9	80·4	85·0	83·3	86·9	85·2	89·2	86·9	87·5	87·0	85·3	85·8	84·1	84·1	79·0	81·7
5	75·2	77·3	73·8	75·9	77·1	77·2	79·6	79·3	80·3	80·4	85·2	83·4	87·6	85·2	89·1	86·9	87·3	87·0	85·3	85·8	84·1	84·2	78·6	81·6
6	75·1	77·3	73·9	75·8	77·5	77·3	79·7	79·5	80·7	80·3	85·5	83·3	88·5	85·3	88·6	86·9	87·2	86·9	85·5	85·8	84·1	84·1	78·1	81·4
7	74·9	77·3	73·9	75·7	77·9	77·3	80·4	79·3	80·7	80·4	85·9	83·5	88·9	85·4	87·5	86·9	86·9	86·9	85·1	85·7	84·1	84·2	77·7	81·3
8	75·1	77·3	73·9	75·7	78·3	77·4	80·7	79·5	81·7	80·3	85·9	83·5	88·3	85·5	87·5	86·9	87·0	86·8	85·0	85·7	83·4	84·1	78·1	81·2
9	74·8	77·2	74·1	75·8	78·1	77·5	80·9	79·5	81·5	80·5	86·1	83·6	88·4	85·7	88·1	87·0	86·9	86·9	84·6	85·6	83·0	84·1	78·1	81·1
10	74·7	77·2	74·1	75·8	78·3	77·5	80·9	79·6	82·1	80·6	85·8	83·7	88·1	85·7	88·5	86·9	86·8	86·8	84·8	85·5	82·6	84·1	77·8	80·8
11	74·7	77·1	74·2	75·8	78·5	77·7	80·9	79·7	83·1	80·7	85·9	83·9	88·6	85·8	88·6	86·9	86·9	86·8	84·3	85·5	82·4	84·1	78·0	80·7
12	74·7	77·1	74·1	75·7	78·3	77·7	80·8	79·8	83·1	80·8	86·0	83·9	88·4	85·9	88·6	87·0	87·4	86·7	84·0	85·4	81·6	83·9	77·9	80·6
13	74·7	77·0	74·1	75·7	78·5	77·9	80·4	79·8	84·0	80·9	85·5	84·0	88·6	85·9	88·7	86·9	87·5	86·6	83·7	85·3	80·9	83·8	78·5	80·5
14	74·7	76·9	74·1	75·8	78·5	77·9	80·3	79·9	83·7	81·2	85·2	84·0	88·5	86·1	88·6	86·9	87·4	86·6	83·8	85·2	80·9	83·6	78·0	80·4
15	74·5	76·9	74·5	75·8	78·6	78·0	80·3	79·9	83·6	81·4	85·3	84·1	88·1	86·1	88·7	87·0	87·0	86·6	83·8	85·1	81·4	83·5	77·4	80·4
16	74·7	76·9	74·8	75·8	79·0	78·1	81·1	79·9	83·5	81·5	85·4	84·1	88·4	86·2	88·7	87·1	86·9	86·7	84·1	85·0	81·1	83·3	77·4	80·3
17	74·9	76·8	74·8	75·7	79·0	78·1	81·7	80·0	83·6	81·6	85·5	84·1	88·5	86·3	88·4	87·3	86·9	86·6	84·5	85·0	80·2	83·1	78·0	80·2
18	74·9	76·8	75·5	75·8	79·2	78·1	82·3	80·1	83·6	81·8	85·6	84·1	88·6	86·3	88·5	87·3	87·3	86·6	84·6	84·9	79·7	83·0	78·6	80·1
19	74·7	76·7	75·9	75·9	79·1	78·3	82·3	80·2	83·9	81·9	86·1	84·1	88·8	86·4	88·4	87·3	87·4	86·6	84·1	84·9	80·1	82·9	79·1	80·0
20	74·5	76·6	76·3	75·9	79·3	78·5	82·3	80·3	83·7	82·0	86·8	84·1	88·5	86·5	88·0	87·3	87·5	86·6	83·8	84·9	80·5	82·7	78·8	80·1
21	74·4	76·5	76·5	76·1	79·1	78·5	82·1	80·4	83·9	82·1	87·1	84·3	88·5	86·5	87·8	87·2	86·9	86·6	83·9	84·8	80·7	82·5	77·7	80·1
22	74·5	76·5	76·9	76·3	79·5	78·5	81·5	80·5	84·1	82·1	87·4	84·4	88·6	86·5	88·0	87·2	86·6	86·6	84·0	84·7	80·6	82·5	77·0	80·0
23	74·4	76·5	76·9	76·5	79·8	78·6	81·2	80·6	84·3	82·3	87·3	84·5	88·7	86·7	87·9	87·2	85·9	86·5	84·0	84·6	80·7	82·5	77·8	79·9
24	74·1	76·5	76·9	76·5	79·9	78·7	81·3	80·7	84·3	82·3	87·0	84·6	89·0	86·7	87·8	87·1	85·8	86·4	83·6	84·6	81·1	82·4	78·4	79·8
25	74·1	76·5	76·9	76·6	79·9	78·8	81·4	80·7	84·6	82·5	87·0	84·9	88·9	86·7	87·9	87·1	85·6	86·4	83·6	84·6	80·7	82·4	78·9	79·8
26	74·1	76·5	76·9	76·7	79·5	78·9	81·1	80·7	84·5	82·5	87·0	84·9	88·7	86·8	87·6	87·1	85·4	86·3	83·4	84·6	80·5	82·4	79·1	79·7
27	74·1	76·3	77·1	76·8	79·3	78·9	81·1	80·8	84·5	82·6	87·1	84·9	88·4	86·8	87·9	87·1	85·4	86·2	83·3	84·5	79·9	82·3	79·2	79·8
28	74·1	76·3	77·5	76·9	79·1	79·1	80·5	80·8	84·5	82·7	86·6	85·1	88·0	86·9	88·3	87·0	85·3	86·1	83·0	84·5	79·8	82·2	78·4	79·8
29	74·0	76·3			79·1	79·1	80·1	80·7	84·7	82·8	86·4	85·0	88·1	86·9	88·2	87·0	85·2	86·0	83·1	84·3	79·5	82·1	77·9	79·8
30	73·9	76·2			79·4	79·1	79·6	80·7	84·7	82·9	86·8	85·1	88·5	86·9	88·3	87·0	85·4	85·9	83·6	84·1	79·7	81·9	77·5	79·8
31	73·9	76·2			79·4	79·1			84·7	83·0			88·5	86·9	87·9	87·1			83·6	84·1			76·9	79·7
Mean	74·6	76·9	75·1	76·1	78·7	78·1	80·8	80·0	82·9	81·5	86·1	84·1	88·3	86·1	88·3	87·0	86·7	86·6	84·3	85·1	81·6	83·3	78·3	80·5
												Year	82·2	82·1										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

79 ABERDEEN 1945

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	66·5	72·8	72·9	79·3	72·5	78·5	77·8	83·6	*73·4*	76·1	82·0	79·1
2	74·5	72·8	70·3	71·5	71·3	79·1	81·9	79·9	74·9	76·3	83·5	74·3
3	74·5	70·2	70·3	71·9	72·5	*74·0*	*74·5*	80·1	79·8	75·5	83·0	74·1
4	70·7	73·0	76·7	73·1	*70·9*	76·2	84·1	81·2	81·4	78·0	83·5	66·2
5	71·2	70·6	70·9	72·5	71·7	79·5	85·6	84·1	79·8	78·9	82·2	72·1
6	71·0	70·7	74·5	72·5	77·4	82·9	85·8	82·5	76·4	80·1	78·6	71·3
7	68·5	75·9	78·1	77·2	78·1	80·2	81·4	82·4	77·9	72·4	72·1	66·9
8	72·5	72·5	75·8	71·3	79·1	81·9	83·5	82·7	80·3	75·3	78·8	76·4
9	70·8	72·0	72·3	71·5	79·6	77·9	80·9	*75·6*	74·0	81·0	77·6	74·3
10	67·2	71·5	75·9	76·4	77·6	74·7	85·3	78·5	76·4	81·5	75·3	69·7
11	70·8	*66·0*	77·5	78·1	79·6	79·5	85·9	80·2	85·8	76·0	74·0	75·6
12	71·3	67·9	68·0	77·9	75·8	77·9	85·2	82·5	86·8	*70·7*	69·1	70·9
13	73·7	70·7	76·1	72·5	79·1	74·1	84·3	82·1	84·9	72·6	72·0	74·1
14	67·1	73·5	74·0	77·9	77·1	79·7	86·0	85·3	82·0	73·2	77·5	69·0
15	72·5	72·0	71·5	79·6	74·2	79·9	80·8	87·0	79·0	80·5	77·9	68·8
16	73·6	72·4	76·1	79·7	78·5	77·2	86·8	85·3	83·4	77·1	70·9	75·1
17	71·3	71·0	75·3	77·1	80·7	79·1	81·6	86·2	85·4	81·8	*67·3*	74·3
18	71·9	77·7	72·0	81·8	71·9	85·2	80·9	84·7	83·0	73·0	72·9	76·9
19	70·0	73·9	75·7	71·4	79·3	76·0	85·3	82·9	85·9	72·9	78·7	74·6
20	61·9	75·1	74·1	80·7	78·1	80·4	82·2	83·0	75·9	78·6	76·3	68·4
21	67·1	71·3	77·2	75·1	80·2	83·8	84·8	79·9	76·5	81·1	78·6	66·2
22	67·5	74·0	75·1	74·1	80·7	80·2	83·9	83·3	83·1	82·4	71·5	76·9
23	*60·4*	67·5	76·9	71·9	81·0	79·9	85·7	76·1	80·5	71·9	77·1	78·0
24	65·7	72·5	75·8	73·0	78·1	81·2	80·9	85·2	81·3	74·1	79·7	78·6
25	65·9	75·3	71·3	78·1	80·0	77·0	83·2	77·6	79·3	80·8	71·1	79·0
26	63·5	72·7	*67·9*	70·7	79·1	82·0	82·0	77·7	80·4	76·6	72·9	78·1
27	64·1	72·8	68·1	71·9	75·7	81·4	80·3	81·5	78·8	77·6	72·0	74·6
28	68·6	75·1	70·9	69·7	79·1	75·5	79·0	84·1	78·9	77·6	72·7	68·0
29	62·9		72·4	72·3	77·8	75·3	85·7	82·2	76·3	83·0	73·6	73·9
30	70·2		71·4	*68·7*	74·1	80·1	82·1	82·4	81·5	83·0	71·4	70·8
31	72·9		73·9		79·5		81·6	75·9		75·8		*65·7*
Mean	69·0	72·3	73·5	74·6	77·1	79·0	82·9	81·8	80·1	77·3	75·8	73·0
						Year	76·4					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

ESKDALEMUIR

ESKDALEMUIR OBSERVATORY

Latitude	55°19′N.
Longitude	3°12′W.
G.M.T. of Local Mean Noon	12h. 13m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	237·3	..
Thermometer bulbs	..	0·9
Rain-gauge	242·0	..
Dines tilting siphon recorder	..	..
Sunshine recorder	..	1·5
Pressure-tube anemograph ..	250	15

INTRODUCTION

Reference should be made to the 1938 volume for details of site and meteorological instruments. The only important change since that date was the replacement of the Beckley rain-gauge by the Dines tilting siphon recorder in September 1940.

NOTES ON THE METEOROLOGICAL SUMMARIES

The extreme temperatures during the year were 296·9°A. (75·0°F.) on August 1 and 257·9°A. (4·8°F.) on January 20. January 24 with a mean temperature of 266·4°A. (20·1°F.) was the coldest day of the year and July 30, with 289·9°A. (62·4°F.) was the hottest. There were 10 ice days, i.e. days with maximum temperature below 273°A., all occurring in January.

The total rainfall for the year 1450·2 mm. (57·09 in.), was less than normal. Snow fell on 44 days.

The total duration of bright sunshine 1201·9 hr., was nearly normal.

The highest gust of wind during the year was 33·0 m./sec. (74 m.p.h.), on January 18. The highest hourly speed, 20·0 m./sec. (45 m.p.h.), occurred on February 24.

The results of the harmonic analysis of the diurnal inequalities of pressure are set out in the accompanying table. For purposes of comparison the corresponding data are also given derived from the mean inequalities for the period 1911-20 by Dr. A. Crichton Mitchell*.

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* MITCHELL, A. CRICHTON: On the diurnal variation of atmospheric pressure at Eskdalemuir and Castle O'er, Dumfriesshire. *Quart. J.R. met. Soc., London,* 50, 1924, p.127.

HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE
ESKDALEMUIR, LONGITUDE 3°12′ W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1945	1911-1920	1945	1911-1920	1945	1911-1920	1945	1911-1920	1945	1911-1920	1945	1911-1920	1945	1911-1920	1945	1911-1920
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.14	0.01	285	141	0.13	0.23	144	150	0.13	0.13	349	355	0.06	0.05	240	223
February	0.44	0.07	245	155	0.31	0.27	137	143	0.07	0.09	312	348	0.08	0.03	73	69
March	0.33	0.07	18	120	0.39	0.32	146	147	0.02	0.05	23	335	0.05	0.05	43	21
April	0.02	0.16	80	83	0.37	0.31	147	155	0.02	0.03	166	177	0.05	0.05	9	358
May	0.19	0.18	27	57	0.22	0.26	151	150	0.05	0.07	163	162	0.04	0.03	10	326
June	0.19	0.12	117	53	0.24	0.23	131	145	0.09	0.08	155	161	0.02	0.02	349	319
July	0.09	0.13	119	99	0.24	0.21	139	143	0.07	0.07	159	154	0.03	0.02	9	309
August	0.14	0.09	100	104	0.28	0.23	146	149	0.08	0.05	149	158	0.04	0.04	327	331
September	0.19	0.13	95	150	0.39	0.31	140	152	0.04	0.01	90	55	0.06	0.05	334	351
October	0.40	0.06	89	170	0.33	0.31	168	161	0.05	0.07	333	16	0.03	0.03	345	19
November	0.13	0.07	264	142	0.31	0.26	163	166	0.11	0.11	356	7	0.01	0.01	116	347
December	0.47	0.09	167	144	0.15	0.22	140	151	0.11	0.13	356	2	0.03	0.06	183	210
Arithmetic mean	0.23	0.10			0.28	0.26			0.07	0.07			0.04	0.04		
Year	0.06	0.08	113	106	0.27	0.26	147	151	0.01	0.02	20	19	0.02	0.02	3	335
Winter	0.21	0.06	220	146	0.22	0.24	147	153	0.10	0.11	347	358	0.01	0.02	155	200
Equinox	0.20	0.09	66	122	0.36	0.31	149	154	0.01	0.02	41	5	0.04	0.04	4	7
Summer	0.12	0.12	89	75	0.24	0.23	142	147	0.07	0.07	156	159	0.03	0.03	353	324

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

The disposition of the instruments and the arrangement of the tables recording the results remain substantially the same as described in the 1938 volume. Wulf quartz-thread electrometer (N.3040) was calibrated in June. No material change had taken place since the previous year.

TERRESTRIAL MAGNETISM

Reference should be made to the 1938 volume for notes on the instruments and tables.

NOTES ON THE RESULTS

Comparing mean values on all days of 1945 with those for 1944 it is noted that H increased by 4γ, D(west) decreased by 8·5′ and V increased by 17γ. The changes in the deduced quantities N, W, I and T are +12γ, −38γ, +0·1′, +17γ. If these changes are compared with those for previous years the discontinuities introduced on January 1, 1934 in H and V and the components derived from them must be kept in mind.

The ranges between the extreme values recorded during 1945 were H, 336γ; D, 1°5·0′; V, 439γ.

Table I summarizes the magnetic character figures assigned locally and the international mean character figures. At the assembly of the Association of Terrestrial Magnetism and Electricity at Washington in September 1939, a new measure of magnetic disturbance, the *K* index, was agreed upon. Measurements of *K* are now given in this volume replacing the former measure $(HR_H + VR_V)10^{-4}$ in accordance with the International Association of Terrestrial Magnetism and Electricity circular letter dated January 20, 1940. The *K* index is fully described in *Terrestrial Magnetism and Atmospheric Electricity**.

* BARTELS, J., HECK, N.H., AND JOHNSTON, H.F.: The three-hour-range index measuring geomagnetic activity. *Terr. Magn. atmos. Elect., Baltimore. Ma.* **44**, 1939, p.411.

Briefly, a figure is allotted on a scale 0-9 to each 3-hr. interval. The figure is a measure of the range of magnetic force during that period, measured from a curved line which represents the normal quiet day variation. The figures are first allotted from the H magnetogram and then increased, if necessary, by inspection of the D and V curves, so that the most disturbed component determines the final figure. The scale of ranges in γ corresponding to the figures 0-9 varies from observatory to observatory. The lower limit of each number for Eskdalemuir is

K	0	1	2	3	4	5	6	7	8	9
Range in γ	0	8	15	30	60	105	180	300	500	750

Table I has been slightly changed in form from years before 1940 owing to the omission of $(HR_H + VR_V)10^{-4}$. K figures and their sums have been given for each day in the main tables but as it is considered that monthly means of K figures are not a good measure of activity they are not included.

TABLE I

	Magnetic character figures			Mean character figures	
	Number of 0 days	1 days	2 days	Eskdale-muir	Inter-national
January	16	13	2	0·55	0·48
February	9	19	0	0·68	0·51
March	12	15	4	0·74	0·69
April	13	16	1	0·63	0·55
May	13	18	0	0·58	0·41
June	17	13	0	0·43	0·31
July	13	18	0	0·58	0·44
August	11	19	1	0·68	0·39
September	8	20	2	0·80	0·42
October	8	20	3	0·84	0·53
November	17	12	1	0·47	0·34
December	13	17	1	0·61	0·60
Year					
1945	150	200	15	0·63	0·47
1944	161	190	15	0·60	0·52
1943	146	197	22	0·66	0·68
1942	151	191	23	0·65	0·64
1941	172	168	25	0·60	0·73
1940	156	184	26	0·65	0·72
1939	167	172	26	0·61	0·77
1938	183	135	47	0·63	0·76
1937	116	205	44	0·81	0·73
1936	144	198	24	0·67	0·65
1935	130	212	23	0·71	0·67

The values of mean absolute daily range for the months and seasons are brought together in Table II where for convenience of comparison the ranges of declination in angle have been converted to units of force of the component perpendicular to the magnetic meridian.

The frequency distribution of absolute daily ranges recorded in 1945 is shown in Table III which contains also the percentage distribution for 1945 and for the period 1932-1942.

TABLE II - ABSOLUTE DAILY RANGE AND MEAN MONTHLY VALUES

	Mean absolute daily range						Mean daily range expressed as percentage of yearly mean					
	1945			Mean 1932-42			1945			Mean 1932-42		
	H	D	V	H	D	V	H	D	V	H	D	V
	γ	γ	γ	γ	γ	γ	%	%	%	%	%	%
January	59	67	41	78	79	44	80	88	91	81	91	77
February	63	72	36	76	86	50	85	95	80	79	99	88
March	92	101	66	122	113	82	124	133	147	127	130	144
April	85	86	53	125	103	79	115	113	118	130	118	139
May	79	76	44	111	86	66	117	100	98	116	99	116
June	72	63	34	100	81	50	97	83	76	104	93	88
July	84	79	43	106	82	53	114	104	96	110	94	93
August	76	72	45	102	85	57	103	95	100	106	98	100
September	76	74	43	102	95	64	103	97	96	106	109	112
October	83	90	56	97	94	65	112	118	124	101	108	114
November	48	57	30	67	75	41	65	75	67	70	86	72
December	71	79	48	61	69	40	96	104	107	64	79	70
Winter	60	69	39	70	77	44	81	91	87	73	89	77
Equinox	84	88	55	111	101	72	114	116	122	116	116	126
Summer	78	73	41	105	84	57	105	96	91	109	97	100
Year	74	76	45	96	87	57	..	..	..	..	..	..

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

TABLE III - FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE

Range	Number of cases, 1945			Percentage distribution					
				H		D		V	
	H	D	V	1945	1932-42	1945	1932-42	1945	1932-42
γ				%	%	%	%	%	%
0 - 9	0	0	11	0·0	0·0	0·0	0·0	3·0	3·0
10 - 19	8	2	64	2·2	1·0	0·5	0·4	17·5	15·8
20 - 29	24	16	86	6·6	4·2	4·4	2·9	23·6	22·1
30 - 39	23	28	65	6·3	6·6	7·7	5·7	17·8	16·8
40 - 49	36	30	40	9·9	8·7	8·2	8·1	11·0	9·5
50 - 59	59	59	27	16·2	11·4	16·2	13·2	7·4	6·9
60 - 69	45	67	21	12·3	13·2	18·4	14·0	5·8	5·1
70 - 79	50	44	11	13·7	10·6	12·1	12·5	3·0	3·4
80 - 89	29	22	7	7·9	9·3	6·0	10·3	1·9	2·7
90 - 99	21	24	6	5·8	6·9	6·6	7·8	1·6	2·3
100 - 109	21	15	4	5·8	5·3	4·1	5·3	1·1	1·8
110 - 119	8	13	2	2·2	4·5	3·6	3·8	0·5	1·4
120 - 129	9	11	5	2·5	2·9	3·0	3·3	1·4	1·4
130 - 139	8	7	2	2·2	2·7	1·9	2·5	0·5	0·9
140 - 149	5	4	1	1·4	1·8	1·1	1·8	0·3	0·8
150 - 159	1	4	2	0·3	1·9	1·1	1·7	0·5	0·5
160 - 169	2	6	1	0·5	1·3	1·6	1·4	0·3	0·5
170 - 179	3	4	1	0·8	1·0	1·1	0·8	0·3	0·2
180 - 189	4	2	0	1·1	0·8	0·5	0·8	0·0	0·5
190 - 199	2	1	2	0·5	0·7	0·3	0·7	0·5	0·4
200 +	7	6	7	1·9	5·2	1·6	3·1	1·9	4·0
Days omitted	0	0	0	..	..	..	..	..	..

The average values of the diurnal inequality ranges for the year and seasons for the period 1932-42 (not the values of the range of the representative mean diurnal inequalities for this period) are given in Table IV along with the 1945 values expressed as a percentage of the average values. The units employed are 1γ for force and 1′ for declination.

TABLE IV - AVERAGE RANGE OF DIURNAL INEQUALITY 1932-42
WITH 1945 AS PERCENTAGE OF THIS

		All days			International quiet days			International disturbed days		
		V	H	D	V	H	D	V	H	D
		γ	γ	′	γ	γ	′	γ	γ	′
Year	1932-42	25·4	36·9	8·54	12·8	33·6	8·17	71·7	52·1	11·47
	1945(%)	80	76	92	101	90	94	78	63	90
Winter	1932-42	19·5	18·5	6·70	5·6	15·7	4·23	61·0	28·8	10·86
	1945(%)	79	81	84	105	78	98	77	90	85
Equinox	1932-42	32·1	42·6	10·02	13·9	38·8	9·56	94·5	72·8	14·56
	1945(%)	81	77	93	98	97	96	87	52	91
Summer	1932-42	29·8	58·0	11·66	20·8	49·2	11·37	71·6	82·2	12·51
	1945(%)	85	79	93	98	88	87	74	67	97

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

Irregular changes in declination.- In connexion with the supply of declination data to mine surveyors it has been the practice to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits which were adopted in consultation with representative mine surveyors are: less than 5′, between 5′ and 15′, between 15′ and 30′ and greater than 30′. The range is less than 5′ in about 85 per cent. of the hourly periods. The actual frequencies of occurrence in the last three of the four divisions mentioned are set out below. A range of 30′ is equivalent to a change of 144γ in the component of horizontal force perpendicular to the magnetic meridian.

Number of cases per month, 1945

Range interval	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
5-15′	56	53	107	67	42	23	46	32	46	76	27	75	650
15-30′	11	7	21	6	1	0	2	2	9	6	3	18	86
>30′	0	0	3	1	0	0	0	0	0	2	0	1	7

Hourly distribution, 1945

Range	Hour (G.M.T.) ending at																							
interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5-15′	49	47	40	30	25	17	14	12	10	10	20	17	14	11	18	23	24	20	32	35	50	50	41	41
15-30′	5	3	5	1	2	0	2	1	1	1	1	0	0	2	1	1	5	9	8	12	11	7	3	5
>30′	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0

Principal disturbances.- Particulars of the principal magnetic disturbances recorded during the year are given in Table V. Corresponding information for the same disturbances is given in the Lerwick Section. The magnetograms for the most highly disturbed days are not reproduced in this volume, but photographic copies may be obtained on application to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C.2.

TABLE V – PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT ESKDALEMUIR, 1945

No.	From	To	Horizontal force					Declination					Vertical force				
			Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range	Max.	Time	Min.	Time	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	′	d. h. m.	′	d. h. m.	′	γ	d. h. m.	γ	d. h. m.	γ
1	Jan. 9 20	Jan. 10 21	564	10 2 4	442	10 0 0	122	34·1	10 6 50	−9·3	9 22 34	43·4	1129	10 13 28	1048	10 2 11	81
2	Jan. 15 2	Jan. 16 5	571	15 16 46	396	15 18 47	175	27·3	15 12 23	−6·5	15 16 52	33·8	1342	15 16 50	1087	15 5 49	255
3	Jan. 28 17	Jan. 30 23	570	29 3 23	379	29 2 46	191	29·7	30 4 35	−10·2	29 1 46	39·9	1182	29 17 43	940	29 4 26	242
4	Feb. 26 14	Feb. 28 4	642	27 19 22	461	26 17 50	181	25·0	27 14 45	−6·6	26 18 18	31·6	1160	26 16 18	1077	27 0 25	83
5	Mar. 10 23	Mar. 13 3	618	11 0 12	403	12 22 9	215	33·1	12 17 1	−23·2	12 22 27	56·3	1233	12 17 23	1036	11 2 1	197
6	Mar. 14 12	Mar. 17 4	648	15 22 21	371	15 2 45	277	35·8	15 22 3	−16·4	15 2 3	52·2	1180	15 18 2	931	15 2 38	249
7	Mar. 25 12	Mar. 28 21	608	26 23 21	371	28 11 20	237	35·8	28 13 36	−7·3	26 19 11	43·1	1189	26 16 24	1035	26 0 36	154
8*	Apr. 1 4 59	Apr. 2 20	551	1 5 1	364	1 11 0	187	36·6	1 12 55	2·5	1 20 30	34·1	1190	1 15 2	1039	2 2 10	151
9	Apr. 5 15	Apr. 9 6	606	6 17 34	388	5 20 49	218	29·1	5 20 43	−2·9	5 20 15	32·0	1160	6 17 19	1028	8 1 32	132
10*	Apr. 11 7 27	Apr. 15 4	618	12 20 40	439	12 1 50	179	34·1	11 12 50	2·5	14 19 57	31·6	1154	11 16 1	1021	12 1 57	133
11*	May 9 8 2	May 12 7	604	10 21 29	473	11 9 48	131	28·6	11 14 2	−3·8	10 21 56	32·4	1166	11 16 21	1072	9 12 39	94
12*	June 30 3 26	July 2 6	629	30 16 21	454	1 9 58	175	28·6	1 13 49	−3·0	1 0 45	31·6	1171	1 18 10	1004	1 5 0	167
13	Aug. 28 1	Aug. 28 22	643	28 2 11	446	28 10 3	197	22·4	28 13 32	−16·0	28 3 55	38·4	1138	28 16 40	903	28 3 39	235
14	Sept. 16 23	Sept. 19 4	601	17 21 45	415	17 9 33	186	30·4	18 15 19	−10·2	18 21 48	40·6	1297	18 16 54	1010	19 1 9	287
15	Oct. 12 6	Oct. 13 4	564	12 10 19	440	12 18 4	124	28·9	12 13 35	−2·1	12 13 15	31·0	1190	12 14 15	1057	12 23 55	133
16	Oct. 23 23	Oct. 26 5	607	24 17 22	372	25 0 12	235	30·5	25 14 15	−26·3	25 1 32	56·8	1212	24 19 28	980	25 2 14	232
17	Oct. 27 11	Oct. 29 3	602	28 20 21	369	28 0 55	233	20·1	28 12 49	−22·0	28 0 9	42·1	1147	28 17 52	941	28 1 25	206
18	Nov. 8 11	Nov. 10 15	557	9 7 40	402	9 9 50	155	38·6	9 7 16	−7·6	8 20 50	46·2	1175	9 16 36	1052	9 3 10	123
19*	Dec. 13 12 38	Dec. 14 24	583	14 4 45	312	14 1 41	271	37·1	14 13 58	−26·4	14 4 44	63·5	1287	14 14 9	962	14 5 42	325
20*	Dec. 19 18 11	Dec. 21 16	644	19 23 12	442	19 23 36	202	23·2	20 18 40	−12·8	19 23 4	36·0	1203	20 20 19	1082	21 4 8	121

Where the beginning of a disturbance has been marked by a "sudden commencement", the serial number is followed by an asterisk (*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added: H, 16000γ; D, 12°; V, 44000γ.

REMARKS ON MAGNETIC AND ALLIED PHENOMENA, 1945

GENERAL:– This year brought a resurgence of solar and magnetic activity following on the minimum which was judged by Zurich to have occurred at 1944·2. Spotless days became infrequent and most of the spots belonged to the new cycle, being in latitudes 15° to 35°. Less than 5 per cent. of spots during the year were old-cycle spots in low latitude.

In the notes which follow, the sunspot data have been extracted from an article in *The Observatory* for May 1946. The abbreviation C.M.P. is used for Central Meridian Passage.

JANUARY (average character figure 0·55).– In the first 8 days the 4th was marked by a small regular disturbance and the 5th and 8th by their quietness. Increased activity from 9d.20h. to 10d.21h. gave ranges of 122γ in H, 43·4′ in D and 81γ in V. The 11th was notably quiet. The next decided activity occurred from about 15d.2h. to 16d.3h. This gave sharp peaks in the traces at about 15d.17h. and over-all ranges of 175γ in H, 33·8′ in D and 255γ in V. Thereafter slight activity continued until the period 23rd–25th which was exceptionally quiet. Considerable activity again set in at 28d.17h. and lasted until about 30d.23h. after which only slight disturbance was recorded. On the early morning of the 29th there was some marked oscillation in H and D and a sharp minimum in V at about 4h.30m. This was followed by comparable oscillation in D at about 20h. The ranges were 191γ in H, 39·9′ in D and 242γ in V.

FEBRUARY (average character figure 0·68).– February 1st was notably quiet and other quiet days were the 13th and 21st. There was moderate disturbance from the 15th to the 17th. The 24th–25th had a few isolated oscillations and these were followed by more continuous disturbance from 26d.14h. to 28d.1h. Fairly pronounced bays in D between 18h. and 22h. on the 26th and at about the same time on the 27th together with a peak in H between 19h. and 20h. on the 27th gave ranges of 31·6′ in D and 181γ in H. The range in V was only 83γ.

MARCH (average character figure 0·74).- Activity on the first four days of March was slight. It was more marked on the 5th-6th and again on the 8th. Pulsations on the afternoon of the 9th may be worthy of note. The first period of decided activity started at about 10d.23h. and lasted till about 13d.2h. Soon after midnight of 10th-11th there was considerable slow oscillation of H and D and a decrease of V. The next prominent feature was a peak in V at 11d.18h. The traces were however most disturbed on the 12th, V having a maximum at about 12d.17h. followed by a progressive decrease to a minimum at 23h.20m., while D and H had fairly large oscillation between 20h. and 23h. The ranges were 215γ in H, 56·3′ in D and 197γ in V. This disturbance may have been associated with a sunspot group whose time of C.M.P. was March 8·8.

Marked disturbance was renewed at 14d.20h. and continued until 17d.4h. There were marked troughs in the traces of H and V between 1h. and 3h. on 15th, with corresponding though less pronounced features in D. Rapid oscillation of smaller amplitude in H and D during the day was succeeded by fairly large, slower oscillations in H and D and a trough in V between 22h. and 23h. This was the culmination of the disturbance although it persisted into the early hours of the 17th.

Except for isolated deviations of the traces of H and D at about 20d.21h. and 21d.19h. there was no further pronounced activity until the 25th and the 22nd-23rd was notably quiet. At about noon on the 25th however, somewhat irregular disturbance set in. This gave a noteworthy variation in V from a peak at 26d.16h.25m. to a minimum at 23h.30m. with a fairly large bay in D between 19h. and 20h. These features recurred less strongly on the following night. The greatest effect in H was a sharp drop to a minimum at about 28d.11h. and a somewhat less pronounced minimum towards 14h. accompanied by some fairly sharp oscillation. At about 14h. there was also another peak in V. The ranges were 237γ in H, 43·1′ in D and 154γ in V. Pulsations were noticeable on the 30th and 31st.

APRIL (average character figure 0·63).- April opened with noteworthy activity which was introduced at 1d.4h.59m. by a sharp change resembling a sudden commencement. The diurnal ranges of H and D were considerably amplified and the traces serrated, while V had rather high values in the afternoon followed by a falling off to a minimum at 2d.2h.10m. The disturbance may be said to have ended at about 2d.20h. Over-all ranges reached 187γ in H, 34·1′ in D and 151γ in V. A possibly associated sunspot group had its C.M.P. at April 1.2.

Considerable activity recurred on 5d.15h. after two days of only slight disturbance and lasted until about 8d.19h. During this period outstanding features were isolated oscillations at 5d.20h. to 21h., 6d.17h. to 18h. and 7d.22h. to 23h. Apart from these the amount of disturbance was not great. The ranges were 218γ in H, 32·0′ in D and 132γ in V.

After two further semi-quiet days a "sudden commencement" at 11d.7h.27m. introduced another period of irregular activity lasting until about 15d.3h. In this period the traces were appreciably more serrated than in the preceding one, and isolated oscillations were less prominent. The slow changes from day to night were however greater, especially in V from the afternoon of the 11th to the early morning of the 12th. There was one marked peak in H between 12d.20h. and 21h. The ranges were 179γ in H, 31·6′ in D and 133γ in V.

During the remainder of the month moderately disturbed and semi-quiet conditions alternated. The moderately disturbed periods were from 19th-20th, 22nd-24th and the 30th. The 27th and 28th were noticeably quiet. An isolated peak in H between 30d.16h. and 18h. perhaps deserves notice.

MAY (average character figure 0·58).- Slight to moderate disturbance marked the first eight days of May, decreasing on the 7th-8th which were semi-quiet. The most noticeable single feature of the period was a peak in the H trace between 3d.16h. and 17h.

At 9d.8h.2m. a "sudden commencement" introduced the most marked disturbance of the month. There was some moderate slow oscillation daily until the 11th. The ranges were 131γ in H, 32·4′ in D and 94γ in V. Thereafter more or less disturbance recurred daily and hardly any day could be called even semi-quiet. On the 30th the range in H exceeded 130γ again but the ranges of D and V were much smaller than on the 10th-11th.

JUNE (average character figure 0·43).- There was only slight activity on the first five days of June. This relatively quiet period was followed by one of moderate activity until the 11th. The range from the 6th to the 7th reached 146γ in H, but in D and V the disturbance was much smaller. Subsequently, until the 30th, conditions were in general slightly disturbed. In this period the 15th, the 20th to the 24th and the 29th might be picked out as relatively quiet; while on the other hand the 17th, between 15h. and 17h., had a noteworthy slow oscillation in H.

The chief disturbance of the month set in with a "sudden commencement" at 30d.3h.26m. It continued into July. The maximum value of H namely 16629γ was however recorded on the first day at 30d.16h.21m.

JULY (average character figure 0·58).- The beginning of the month was disturbed following on the "sudden commencement" of June 30d.3h.26m. and the oscillations of H on 30th June. The over-all range reached 175γ in H, 31·6′ in D and 167γ in V. Disturbance was much smaller on the 2nd and 3rd but recurred on the 4th, with a "sudden commencement" at 4d.3h.2m. In the period which followed there was a noteworthy range of 181γ in H between a minimum at 6d.7h.40m. and a rather isolated peak at 7d.21h.8m. The end of this period may be placed on the evening of the 9th, and during the following week until 15th inclusive conditions were rather quiet. On 16th-17th there was a recurrence of moderate disturbance principally in H, and on 23rd-24th in H and D. There was also some disturbance in the closing days of the month from 28th inclusive after the semblance of a "sudden commencement" at 28d.1h.40m.

AUGUST (average character figure 0·68).- The moderate disturbance of the end of July continued on 1d.-2d. August and there was a noteworthy range of 120γ in V on the latter day. Thereafter until 22nd, general disturbance was hardly more than slight though there were a few moderate peaks and bays. The 9th-10th, and 18th-21st were either quiet or verged on quiet. A moderate disturbance on 22nd-23rd was of the type with evening maximum and early morning minimum in V. It did not recur and the next three days were quiet. The 27th brought further activity which was noteworthy for an exceptionally marked bay in the V trace from 28d.2h. to 28d.6h. with corresponding deflexions in the traces of D and H. The over-all ranges on 28th August were 197γ in H, 38·4′ in D and 235γ in V. Again, however, the activity was not long drawn out and the last two days of the month were almost quiet.

SEPTEMBER (average character figure 0·80).- September opened with slight irregular disturbance which increased to moderate and became more regular on 4th. Semi-quiet days (marked however by a "sudden commencement" at 8d.20h.52m.) followed until the 11th-13th during which a moderate normal disturbance was recorded. Two more fairly quiet days preceded a small storm which over-all lasted from about midnight of 16th-17th until 19d.4h. Oscillations in the traces, especially those of H and D, were somewhat irregular on 16th-17th and the body of the storm was shown more clearly on 18th-19th. The V trace especially had well marked maxima between 16h. and 18h. followed by fairly regular decrease to a minimum at 19d.1h.9m. The ranges were 186γ in H, 40·6′ in D and 287γ in V. The remainder of the month was either quiet or only slightly disturbed, with no outstanding features.

OCTOBER (average character figure 0·84).- There was varied slight activity in the first part of October and some fairly marked oscillation shortly before midnight of 7th-8th. The three days 9th-11th were notably quiet. They preceded the first well defined disturbance of the month which began at about 12d.6h. and ended at about 13d.3h. although subsequent oscillations for some days might be associated with it. The ranges on the 12th-13th reached 124γ in H, 31·0′ in D and 133γ in V. Conditions did not become really quiet again during the succeeding days and on the 19th

at about 20h.-22h. there was again a short period of fairly marked oscillation, especially in H, together with decreased values of V from 19d.21h. to 20d.3h. with a minimum at about 20d.1h. Succeeding days were semi-quiet until the recording of a "sudden commencement" at 23d.23h.40m. This introduced a small storm whose main phase occurred between 24th forenoon and 25th early morning. There was a peak in H between 17h. and 18h. and a marked minimum just after midnight. Vertical force had its peak between 19h. and 20h. and a rounded minimum at about 25d.2h. The change in declination was mainly a decrease which was most marked between 1h. and 2h. on 25th. The ranges were 235γ in H, 56·8′ in D and 232γ in V. Conditions did not settle down again until 26d.4h. and there was little more than one day's quiet interval before further well marked deviations in all three traces between 27d.19h. and 28d.5h. The disturbance gave ranges of 233γ in H, 42·1′ in D and 206γ in V. Activity decreased on the 29th and the last two days of the month were fairly quiet.

NOVEMBER (average character figure 0·47).- Apart from some oscillation on the night 4th-5th and rapid small pulsations in the forenoon and afternoon of the 6th and the 7th, the first week of November was fairly quiet. This was followed by a period of disturbance lasting on and off until the 17th. The best defined portion of this disturbance occurred between about 8d.11h. and 10d.15h., but even this was somewhat irregular. The most marked features were maxima in V between 19h. and 20h. on 8th and 16h. and 17h. on 9th. There were fairly marked low and high values of D corresponding roughly with the maximum and the second minimum of V respectively. The chief change in H was a fairly rapid drop from a peak at 9d.7h.40m. to a minimum at 9d.9h.50m. The over-all ranges during these days were 155γ in H, 46·2′ in D and 123γ in V. Subsequently the 14th was fairly quiet but other days had varying degrees of disturbance until 17th when a quiet period set in. This lasted with very little interruption until the end of the month.

DECEMBER (average character figure 0·61).- The notably quiet conditions of the latter part of November continued until the night of 5th-6th December. There followed a period of slight activity lasting until the 9th. From the 10th until noon of the 13th quiet conditions recurred. At 13d.12h.38m., however, a "sudden commencement" heralded a small storm. Horizontal force decreased to minimum at 14d.1h.41m. and then rose to its maximum at 14d.4h.45m. There was not much oscillation. Declination decreased until 14d.4h.44m. and then reverted quickly. Its maximum occurred some time afterwards at 14d.13h.58m. The V trace had an irregular rounded maximum between 20h. and 23h. on 13th followed by a progressive decrease to low values at about 6h. and 7h. on 14th. Its actual maximum was recorded in a peak accompanying the maximum of D. The ranges were 271γ in H, 63·5′ in D and 325γ in V. Of the succeeding days the 18th and 19th could be termed quiet until 19d.18h.11m. when there was another "sudden commencement". The outstanding feature which followed was a large oscillation of 202γ in H. Other parts of the disturbance were not outstanding. The range of D was 36·0′ and that of V 121γ. Subsequently quiet prevailed until a third "sudden commencement" at 23d.16h.16m. introduced a somewhat disturbed night. The following night, by contrast, was notably quiet but between 7h. and 8h. on 25th, irregular disturbance set in and continued until the 30th. In this period the most marked feature was a deep bay of 34·9′ in D between 18h. and 20h. on 27th. There was also a noteworthy isolated peak in H at about 28d.22h. The last two days of the month were fairly quiet.

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

80 ESKDALEMUIR: h_b (height of barometer cistern above M.S.L.) = 237·3 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	05·9	04·6	05·4	71·3	*58·5*	65·2	07·0	86·0	96·9	65·5	*62·4*	*64·0*	*92·3*	89·2	*91·1*	76·8	72·4	74·9
2	04·6	87·1	98·2	79·0	59·7	65·1	13·0	06·9	10·8	73·6	*62·4*	69·1	89·2	81·9	84·9	81·8	75·0	78·5
3	87·1	73·6	77·3	89·6	73·5	84·6	*13·2*	08·2	10·9	80·2	71·5	75·1	81·9	77·2	78·7	81·6	74·6	77·5
4	86·7	77·0	81·2	84·1	68·9	76·9	08·2	02·6	04·3	83·2	79·1	81·9	77·6	75·0	76·1	82·3	74·0	77·1
5	87·8	84·8	86·6	82·9	75·4	78·9	04·7	99·2	01·3	93·9	76·9	84·2	75·1	*68·6*	*72·2*	82·9	76·9	81·1
6	88·0	83·0	85·7	85·1	70·6	80·3	02·8	00·9	01·7	05·3	93·9	99·9	84·5	*68·6*	75·9	78·1	72·6	75·7
7	83·0	78·4	81·0	77·6	63·3	69·1	03·7	01·6	02·8	*07·7*	05·3	*06·5*	87·2	84·5	86·2	77·3	*68·3*	*71·5*
8	81·3	79·6	80·4	77·9	61·7	69·7	11·3	02·9	07·8	06·4	03·9	05·2	86·9	82·0	84·9	86·4	72·5	79·0
9	84·5	79·3	81·6	75·3	61·4	69·0	13·1	11·0	*11·8*	05·8	01·6	04·1	84·5	78·6	81·0	88·6	86·4	87·6
10	88·8	84·5	86·2	67·0	61·5	*63·8*	11·1	07·3	08·6	01·6	88·4	95·0	88·9	84·5	86·6	90·2	87·4	88·4
11	99·3	88·8	94·4	68·4	63·9	65·9	08·1	04·9	06·9	88·4	78·8	82·1	89·3	88·0	88·7	89·6	80·9	85·7
12	04·3	99·3	02·0	69·1	60·8	65·9	05·0	99·9	01·9	83·8	76·9	79·3	89·2	83·4	87·2	95·5	79·4	85·3
13	*07·6*	03·6	*05·8*	79·3	64·3	71·0	01·7	99·4	00·7	87·6	83·8	86·0	83·4	71·0	75·2	95·9	89·9	93·5
14	07·2	02·4	04·3	91·7	79·3	84·5	99·4	94·4	97·1	87·6	82·8	85·0	79·6	73·6	76·3	90·9	87·2	89·7
15	02·5	89·1	97·1	93·0	89·5	91·3	94·4	89·0	91·1	91·9	86·5	90·3	83·9	78·8	82·7	87·2	79·7	82·2
16	89·1	70·4	80·5	92·5	87·9	89·9	93·3	87·1	89·3	92·0	89·1	90·1	82·9	78·6	80·4	95·2	84·6	90·9
17	77·1	60·8	71·5	94·0	90·5	91·7	96·1	93·2	95·1	94·5	91·9	92·7	88·7	78·1	82·9	95·2	90·7	92·9
18	60·8	*34·1*	*44·5*	02·5	93·6	98·1	95·7	86·0	90·8	03·4	94·5	95·3	89·7	85·6	87·6	94·7	90·1	92·0
19	69·4	49·8	63·6	02·8	94·8	00·1	86·0	72·1	79·5	03·2	94·9	00·0	85·8	82·1	84·1	94·7	87·6	91·2
20	75·6	65·4	69·1	*08·0*	94·8	02·3	92·6	78·4	87·0	94·9	86·2	89·5	82·1	73·7	77·2	87·6	77·1	81·4
21	83·7	75·6	78·9	07·2	99·6	*03·2*	94·6	91·4	93·0	89·0	86·0	86·7	76·9	74·4	75·4	87·7	80·7	83·7
22	85·7	78·2	83·3	01·5	97·7	99·9	94·1	92·3	93·0	92·6	88·8	90·6	76·5	72·7	73·8	90·2	87·2	88·8
23	78·2	75·0	76·0	02·1	97·6	99·6	92·8	86·3	89·9	93·9	91·1	92·5	89·7	76·5	84·7	91·2	87·4	89·0
24	81·2	76·2	78·2	01·8	84·5	93·8	86·3	78·0	81·6	91·7	87·0	89·1	89·9	84·3	87·7	98·6	91·1	94·5
25	84·8	81·2	83·5	84·5	80·7	82·4	84·5	77·1	79·2	87·0	83·9	85·2	84·3	76·6	80·5	*99·3*	94·1	*97·4*
26	84·6	82·8	83·4	95·5	82·2	88·5	91·0	84·5	87·9	84·5	78·4	80·7	76·6	72·7	73·8	94·1	87·5	90·6
27	91·6	82·8	86·1	01·0	95·5	98·9	91·0	85·6	88·2	79·9	78·0	78·9	75·7	73·0	73·8	87·5	82·3	85·1
28	03·6	91·6	98·8	01·0	86·9	96·4	86·2	80·2	82·6	79·6	72·3	74·9	75·6	73·6	74·5	82·6	78·8	80·1
29	03·0	79·0	94·7				80·2	70·0	75·0	87·9	75·0	82·6	74·8	72·3	73·2	80·1	76·7	78·5
30	79·0	66·8	70·1				78·4	73·7	75·9	91·7	87·9	89·6	77·7	74·8	76·5	78·2	70·2	75·2
31	72·6	60·6	68·9				77·1	*65·5*	*72·1*				79·1	73·2	76·6			
Mean	88·34	78·88	83·82	88·77	78·52	83·79	97·31	90·83	94·02	90·94	84·64	87·69	83·21	77·65	80·34	88·07	81·44	84·63

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	77·6	*69·7*	*72·6*	96·7	94·9	95·9	93·7	90·9	91·7	09·1	05·5	07·4	88·4	86·0	87·2	82·4	68·9	76·6
2	86·5	77·6	82·5	97·0	95·5	*96·2*	96·2	93·6	94·6	*10·0*	08·5	*09·2*	88·3	86·7	87·5	73·0	66·3	69·8
3	86·7	85·0	86·0	*97·5*	93·3	95·8	96·8	95·2	95·9	09·2	04·5	06·7	88·1	86·3	87·2	89·4	73·0	81·1
4	85·0	81·8	82·9	93·3	89·3	90·4	98·3	94·6	95·8	04·5	97·6	99·8	90·6	86·4	88·5	89·9	72·1	81·1
5	82·6	80·9	81·8	89·3	83·0	85·5	99·4	97·8	98·4	04·8	98·9	02·8	98·0	90·3	93·5	90·8	74·2	83·1
6	80·9	79·0	79·7	84·5	80·1	82·8	99·0	97·5	98·3	04·4	01·0	02·4	*00·8*	98·0	*99·8*	96·0	90·8	94·4
7	88·6	79·6	83·6	83·8	79·0	81·2	98·7	95·3	96·8	01·4	95·2	99·4	99·7	86·9	94·1	98·6	93·8	95·4
8	90·3	88·6	89·5	88·7	83·8	86·2	95·5	91·3	93·1	94·8	91·0	93·8	88·8	85·0	86·8	02·4	98·6	*00·8*
9	88·9	80·0	83·8	88·6	85·0	86·6	92·4	89·2	91·1	91·0	76·5	83·3	92·6	88·7	90·2	00·6	95·9	97·6
10	83·2	80·6	82·1	85·0	82·7	83·7	89·2	84·8	86·4	87·7	74·5	78·5	94·8	92·3	93·7	99·0	97·2	98·1
11	85·8	82·4	83·5	87·8	84·5	86·2	89·2	87·1	88·3	99·2	87·7	94·5	93·3	88·3	90·5	*03·0*	96·6	99·4
12	92·1	85·5	88·4	90·5	87·6	88·8	90·1	80·2	86·5	02·2	98·9	00·3	91·8	87·7	89·1	02·7	88·8	97·2
13	92·2	88·2	91·0	90·1	85·0	87·6	80·2	73·3	75·9	01·9	00·4	01·2	92·9	91·5	92·3	94·1	84·7	88·2
14	88·2	83·9	85·6	85·0	80·7	82·3	73·7	71·0	72·0	01·4	00·2	00·8	92·5	90·7	91·5	94·6	87·2	91·7
15	88·2	77·6	84·1	81·0	78·6	80·0	78·5	73·7	76·8	00·8	98·9	99·5	91·5	89·5	90·3	87·2	74·7	80·9
16	91·2	75·2	80·0	82·0	80·3	81·1	79·2	72·7	75·9	99·6	98·1	98·9	93·6	91·2	92·5	74·7	63·1	66·9
17	95·2	91·2	94·0	84·1	81·3	82·2	80·4	79·1	79·8	98·5	95·5	96·9	97·1	93·2	95·2	63·1	42·5	49·3
18	93·4	83·0	88·9	84·8	83·1	83·8	79·4	74·4	76·2	96·7	93·3	94·9	97·5	94·5	96·4	42·5	*33·5*	*38·1*
19	83·0	73·4	76·7	83·4	79·6	81·0	79·5	73·7	75·7	93·3	87·4	90·8	94·5	89·3	90·9	57·3	36·7	44·4
20	82·1	71·3	75·3	79·8	77·0	78·5	83·2	76·7	80·5	87·4	79·4	83·1	89·4	88·0	88·6	72·6	57·3	66·9
21	84·2	79·0	82·0	77·0	*67·9*	*71·0*	85·8	73·6	82·8	79·4	72·6	75·9	92·6	88·4	90·3	73·4	70·4	72·5
22	90·8	79·3	85·9	80·2	68·0	73·1	73·7	*59·9*	*68·4*	74·1	71·9	73·1	92·9	88·9	91·6	70·4	56·3	62·4
23	93·2	89·9	92·0	80·9	73·0	78·8	76·0	67·9	70·5	72·5	62·5	65·3	88·9	84·1	85·7	58·3	53·8	56·3
24	93·4	92·4	92·9	76·4	69·7	72·9	95·3	76·0	87·9	65·8	*41·3*	51·6	88·5	84·4	85·9	53·8	45·4	47·7
25	92·8	89·9	91·3	88·5	76·4	80·9	98·0	95·0	96·7	53·0	42·4	48·1	91·3	87·4	89·5	72·2	49·7	60·4
26	90·1	86·7	88·2	92·6	88·5	91·3	97·5	93·2	94·5	59·3	42·0	*47·5*	98·1	87·4	94·0	77·4	66·3	73·9
27	90·1	86·9	88·0	91·4	87·6	89·1	94·4	88·0	90·7	69·1	59·3	66·9	97·7	89·4	93·6	75·1	66·0	71·7
28	92·4	89·4	90·4	88·5	85·9	87·3	96·7	89·7	92·2	66·9	61·8	63·0	90·7	85·5	89·0	73·1	68·1	70·0
29	94·5	92·2	93·1	85·9	82·4	84·2	01·4	96·7	99·3	73·4	64·6	69·3	85·5	*81·6*	*83·0*	84·4	71·2	77·4
30	*96·4*	93·7	*95·0*	89·0	85·3	87·2	*05·6*	00·5	*03·1*	84·4	72·2	79·6	86·0	82·4	83·8	91·8	84·4	88·8
31	95·1	92·2	93·2	91·6	88·5	90·0				86·0	81·7	83·1				92·6	91·1	91·7
Mean	88·86	83·42	85·93	86·93	82·50	84·57	89·90	84·42	87·20	89·73	82·75	86·09	92·51	88·33	90·41	81·82	71·57	76·59
									Annual	88·87	82·08	85·42						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

81 ESKDALEMUIR: h_b = 237·3 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*84·52*	84·40	84·31	84·35	84·27	84·09	83·96	83·93	84·15	84·40	84·33	84·24	84·11	83·74	83·67	83·56	83·46	83·49	83·41	83·36	83·30	83·25	83·17	*82·91*	83·06	83·82
Feb.	83·21	83·07	82·91	82·83	*82·79*	82·94	83·10	83·37	83·67	83·94	84·11	84·49	*84·56*	84·44	84·18	83·96	83·97	83·94	84·19	84·17	84·20	84·20	84·12	84·09	84·15	83·79
Mar.	*94·71*	94·63	94·50	94·22	94·13	94·15	94·24	94·45	94·51	94·60	94·47	94·40	94·25	93·89	93·62	93·33	*93·13*	93·17	93·35	93·53	93·69	93·85	93·97	94·06	94·02	94·02
Apr.	87·50	87·41	87·27	87·07	*86·95*	87·07	87·30	87·49	87·69	87·85	87·89	87·93	87·88	87·82	87·64	87·53	87·44	87·47	87·62	87·87	88·18	88·32	88·41	*88·42*	88·37	87·69
May	*80·87*	80·75	80·69	80·48	80·43	80·49	80·58	80·63	80·71	80·66	80·62	80·42	80·39	80·28	80·10	79·92	79·88	*79·76*	79·85	79·98	80·12	80·28	80·29	80·28	80·27	80·34
June	*85·11*	84·90	84·69	84·54	84·38	84·40	84·43	84·52	84·53	84·66	84·56	84·57	84·59	84·69	84·61	84·51	84·39	*84·37*	84·41	84·55	84·73	84·91	85·08	85·07	85·02	84·63
July	85·85	85·70	85·55	85·42	*85·39*	85·46	85·58	85·68	85·82	85·95	85·91	85·89	85·98	86·02	86·00	85·87	85·82	85·85	85·96	86·09	86·27	86·54	86·60	86·63	*86·65*	85·93
Aug.	84·95	84·83	84·65	84·42	84·30	84·37	84·45	84·56	84·65	84·75	84·64	84·57	84·53	84·50	84·44	84·37	*84·25*	84·25	84·25	84·47	84·72	84·90	84·95	*84·96*	84·83	84·57
Sept.	87·46	87·33	87·14	86·86	*86·68*	86·69	86·76	86·94	87·17	87·41	87·35	87·29	87·18	87·15	87·05	86·92	86·82	86·86	87·00	87·26	87·61	87·78	87·86	*87·97*	87·94	87·20
Oct.	*86·87*	86·74	86·56	86·34	86·24	86·10	86·14	86·16	86·23	86·29	86·13	86·03	85·79	85·58	85·48	85·39	*85·36*	85·48	85·89	86·11	86·27	84·45	86·44	86·33	86·23	86·09
Nov.	90·44	90·35	90·25	90·19	*90·07*	90·12	90·18	90·37	90·69	90·82	*90·91*	90·87	90·70	90·48	90·22	90·10	90·13	90·30	90·40	90·45	90·55	90·52	90·44	90·41	90·32	90·41
Dec.	76·71	76·52	76·37	76·27	76·01	75·93	*75·83*	75·90	76·04	76·27	76·51	76·63	76·54	76·57	76·54	76·63	76·84	76·97	77·09	77·19	*77·21*	77·18	77·08	77·03	77·02	76·58
Annual	85·68	85·55	85·41	85·25	85·14	85·15	85·21	85·23	85·48	85·62	85·60	85·60	85·53	85·41	85·28	85·16	*85·11*	85·15	85·27	85·41	85·56	85·67	*85·69*	85·67	85·65	85·41

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

82 ESKDALEMUIR: h_b = 237·3 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	*14·16*	14·03	13·95	14·01	13·95	13·78	13·65	13·62	13·86	14·14	13·98	13·80	13·61	13·20	13·11	13·03	12·99	13·05	12·99	12·94	12·88	12·82	12·75	*12·48*	12·64	13·42
Feb.	12·26	12·13	11·96	11·89	*11·85*	12·01	12·18	12·44	12·75	12·99	13·09	13·45	*13·47*	13·33	13·05	12·84	12·89	12·89	13·09	13·16	13·23	13·21	13·13	13·11	13·20	12·78
Mar.	*24·09*	24·02	23·89	23·60	23·51	23·52	23·61	23·82	23·79	23·75	23·50	23·36	23·15	22·75	22·47	22·18	*22·00*	22·11	22·39	22·67	22·85	23·10	23·27	23·39	23·38	23·18
Apr.	16·69	16·62	16·50	16·31	16·21	16·33	16·51	16·56	16·62	16·66	16·61	16·56	16·44	16·34	16·11	16·02	*15·95*	16·01	16·28	16·73	17·19	17·42	17·57	*17·63*	17·62	16·59
May	*09·63*	09·53	09·47	09·27	09·22	09·25	09·24	09·15	09·21	08·99	08·76	08·59	08·56	08·39	08·18	08·00	08·01	*07·94*	08·09	08·31	08·60	08·87	08·94	08·97	08·99	08·78
June	*13·64*	13·46	13·25	13·12	12·96	12·94	12·85	12·84	12·75	12·83	12·69	12·67	12·63	12·60	12·57	12·47	*12·38*	12·49	12·48	12·70	12·98	13·26	13·52	13·56	13·55	12·89
July	14·16	14·04	13·90	13·82	13·80	13·83	13·85	13·81	13·83	13·88	13·77	13·80	13·74	13·78	13·75	13·59	*13·57*	13·65	13·81	14·03	14·34	14·73	14·86	14·92	*14·97*	13·98
Aug.	*13·32*	13·24	13·10	12·86	12·77	12·84	12·87	12·84	12·77	12·73	12·52	12·35	12·25	12·19	12·11	12·04	*11·95*	11·98	12·07	12·44	12·83	13·12	13·25	13·31	13·19	12·65
Sept.	16·01	15·90	15·73	15·48	15·30	15·33	15·39	15·49	15·60	15·72	15·55	15·38	15·20	15·17	15·05	14·91	*14·85*	14·94	15·18	15·55	16·00	16·23	16·32	16·49	*16·70*	15·54
Oct.	*15·63*	15·51	15·35	15·13	15·05	14·94	14·99	14·98	14·95	14·86	14·55	14·35	14·03	13·79	13·69	*13·60*	13·61	13·88	14·41	14·69	14·90	15·12	15·15	15·07	14·99	14·66
Nov.	19·53	19·42	19·34	19·29	19·18	19·24	19·32	19·54	19·87	*19·93*	*19·93*	19·81	19·57	19·32	19·05	*18·96*	19·07	19·29	19·42	19·48	19·59	19·57	19·50	19·51	19·42	19·44
Dec.	05·68	05·50	05·33	05·24	04·98	04·92	*04·81*	04·89	05·05	05·26	05·46	05·51	05·34	05·35	05·32	05·45	05·71	05·89	06·04	06·15	*06·19*	06·15	06·07	06·03	06·03	05·52
Annual	*14·56*	14·45	14·31	14·16	14·06	14·07	14·10	14·15	14·23	14·29	14·19	14·10	13·98	13·83	13·68	13·57	*13·56*	13·65	13·83	14·05	14·29	14·45	14·57	14·52	14·52	14·11

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

83 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	72·08	72·10	72·07	71·91	71·68	71·59	71·58	71·50	71·35	*71·20*	71·93	72·79	73·23	73·50	*73·63*	73·35	72·79	72·54	72·37	72·32	72·29	72·40	72·36	72·34	72·31	72·29
Feb.	77·03	76·89	76·91	76·79	76·78	76·74	*76·73*	76·79	76·84	77·18	77·83	78·23	78·67	78·81	*78·97*	78·81	78·45	78·12	77·84	77·76	77·50	77·59	77·57	77·48	77·15	77·60
Mar.	77·05	76·93	76·97	76·97	*76·91*	76·95	77·10	77·08	77·85	79·16	80·24	80·85	81·41	81·68	*81·70*	81·68	81·33	80·72	79·85	78·98	78·87	78·06	77·58	77·39	77·08	78·89
Apr.	76·92	76·64	76·48	76·37	*76·09*	76·11	76·65	77·87	79·34	80·54	81·37	82·22	82·87	83·30	*83·68*	83·47	83·20	82·94	81·92	80·06	78·66	78·00	77·43	76·99	76·64	79·54
May	78·92	78·75	78·76	*78·60*	78·63	78·88	79·84	81·12	82·33	82·99	83·87	84·47	84·49	85·10	*85·34*	85·24	84·75	84·23	83·67	82·69	81·36	80·45	79·85	79·53	79·18	81·83
June	82·23	81·90	81·74	*81·55*	81·56	81·96	83·00	84·01	84·96	85·48	85·92	86·30	86·83	87·31	*87·57*	87·52	87·19	86·88	86·46	85·72	84·71	83·83	83·03	82·54	82·24	84·59
July	84·43	84·09	83·86	83·51	*83·38*	83·71	84·73	86·14	87·30	88·09	88·84	89·35	89·85	89·84	89·97	*90·18*	89·90	89·40	88·85	88·02	86·79	85·68	85·08	84·82	84·47	86·91
Aug.	83·60	83·23	82·83	82·79	82·51	*82·48*	83·09	84·39	85·95	87·33	88·31	89·31	89·88	90·24	*90·29*	90·25	89·99	89·66	88·73	87·30	85·94	84·94	84·32	83·77	83·61	86·30
Sept.	82·59	82·40	82·19	81·83	81·74	*81·58*	81·71	82·48	83·64	84·85	85·91	86·97	87·58	87·69	87·82	*87·85*	87·44	86·97	85·98	84·97	84·17	83·70	83·52	83·04	82·64	84·53
Oct.	80·47	80·37	80·14	80·09	79·91	79·61	*79·54*	79·80	80·70	82·13	83·48	84·43	85·13	85·38	*85·41*	85·34	84·89	83·51	82·53	81·95	81·56	81·23	80·89	80·61	80·43	82·05
Nov.	78·58	78·65	78·41	78·41	78·27	78·16	77·97	77·80	*77·78*	78·41	79·35	80·01	80·56	80·84	*80·84*	80·59	79·84	79·46	79·19	79·08	79·00	78·86	78·74	78·55	78·42	79·05
Dec.	75·99	75·85	75·89	75·89	75·75	75·72	75·68	75·57	*75·45*	75·67	76·12	76·84	77·51	*77·73*	77·67	77·35	76·80	76·50	76·23	76·22	76·01	76·05	75·90	75·89	75·73	76·26
Annual	79·16	78·99	78·86	78·73	*78·61*	78·63	78·98	79·56	80·31	81·11	81·95	82·67	83·19	83·47	*83·60*	83·49	83·07	82·60	81·99	81·27	80·55	80·07	79·70	79·42	79·18	80·83

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

84 ESKDALEMUIR: Louvered hut: h_t (height of thermometer bulb above ground) = 0·9 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	77·1	66·9	73·0	77·5	73·6	75·0	81·8	70·3	76·5	81·7	77·8	79·5	80·7	72·2	75·9	86·4	79·6	82·2
2	*80·7*	76·9	*79·4*	79·3	73·0	76·2	78·0	67·0	*72·9*	84·2	77·0	79·4	81·9	70·6	*75·4*	86·1	80·0	82·7
3	79·9	72·0	75·6	75·2	*66·8*	*72·3*	79·3	*65·9*	73·5	81·2	74·9	77·7	82·6	70·2	75·7	86·4	77·5	82·8
4	74·9	71·1	73·0	81·9	74·4	77·7	83·0	72·1	78·3	83·6	75·9	79·1	82·0	70·1	76·3	86·7	76·1	*82·2*
5	74·9	71·3	73·1	80·8	74·7	78·0	85·1	72·7	79·7	85·3	76·8	80·2	82·3	*68·1*	76·9	85·2	78·7	82·8
6	78·1	72·2	75·6	81·1	74·8	77·3	82·9	74·9	79·6	81·1	77·1	79·2	86·8	79·1	82·0	89·2	83·1	85·6
7	75·4	70·9	72·5	80·6	75·6	78·6	84·3	78·9	81·2	85·3	73·9	79·1	87·8	80·1	84·2	86·6	79·8	83·6
8	74·3	72·0	73·4	79·0	74·5	76·8	85·0	72·6	79·6	84·0	70·9	76·9	91·2	83·1	86·3	88·7	81·1	84·2
9	74·2	70·0	72·7	78·0	74·4	76·2	82·7	72·6	78·9	88·8	69·1	78·4	90·0	82·3	85·1	85·8	80·4	83·0
10	73·1	70·1	72·0	76·9	70·0	73·7	81·4	74·8	79·0	87·7	74·7	80·8	88·0	79·0	83·4	90·7	81·6	85·5
11	75·1	70·8	73·7	74·1	70·7	73·1	83·7	72·3	78·2	81·0	76·6	79·0	*94·5*	78·2	*86·5*	87·1	81·1	84·1
12	75·6	73·8	74·5	81·2	73·1	76·5	83·1	71·2	77·2	83·8	78·9	80·9	91·3	79·1	86·1	88·6	78·5	83·9
13	75·6	73·7	75·0	80·0	75·1	77·3	82·3	77·5	78·9	87·3	78·6	81·6	86·9	78·2	82·8	88·0	78·4	83·3
14	75·0	64·4	70·1	82·6	76·3	79·5	78·5	76·6	77·7	84·7	77·5	81·7	85·6	79·2	82·6	87·1	82·5	84·0
15	78·6	71·0	74·8	80·1	71·7	77·3	81·0	76·9	78·6	85·6	79·2	82·6	86·9	80·2	83·1	86·4	80·6	83·6
16	80·1	77·1	78·9	77·5	70·9	74·1	81·9	77·8	79·4	85·6	80·3	82·7	83·9	82·1	83·0	88·1	76·7	83·1
17	77·9	72·2	74·8	81·3	75·9	79·1	83·4	76·9	79·7	83·2	79·5	80·8	87·6	75·0	83·0	88·3	*75·3*	83·1
18	79·1	71·2	75·9	80·6	78·8	79·7	79·8	78·4	79·2	89·9	76·5	*83·7*	90·4	74·3	83·9	90·6	84·2	86·5
19	71·6	62·1	69·4	82·1	79·1	80·7	81·9	77·0	79·7	*92·4*	73·2	83·4	87·4	76·9	82·7	*96·1*	84·1	*89·7*
20	72·1	*57·9*	67·3	82·0	74·0	78·4	82·2	76·0	79·0	91·3	72·7	82·1	87·2	76·6	80·8	95·1	82·9	89·0
21	72·6	66·7	70·1	80·9	77·0	78·2	80·5	76·9	79·0	86·4	76·3	80·6	91·4	80·6	85·1	92·6	80·5	87·1
22	70·5	60·4	66·8	81·8	76·1	79·1	82·5	74·7	79·7	84·3	75·0	79·7	83·4	80·8	81·7	93·4	79·4	87·7
23	71·2	66·0	69·5	80·4	72·2	75·8	91·4	74·0	82·7	85·6	72·0	78·8	86·9	77·6	81·9	89·6	83·8	86·6
24	69·2	63·0	*66·4*	78·2	73·4	76·5	*92·1*	76·6	*84·3*	87·0	69·7	79·0	89·8	75·8	83·2	91·6	78·9	86·0
25	70·5	62·1	66·7	83·1	78·0	80·8	83·5	73·7	80·2	85·3	73·8	79·0	87·1	79·0	82·9	88·2	76·0	83·5
26	71·8	65·5	68·3	*84·9*	81·2	*83·0*	84·9	69·5	76·9	85·5	75·1	79·6	84·9	78·7	80·8	90·1	82·0	85·3
27	71·9	67·1	69·2	*84·9*	78·8	82·3	80·2	68·2	76·2	82·6	71·2	77·2	85·1	75·3	80·5	87·9	80·9	84·5
28	73·1	63·4	69·8	81·5	78·4	79·8	84·2	75·8	80·0	81·8	69·0	76·1	85·5	75·0	80·3	88·0	81·1	84·6
29	71·2	60·5	66·5				82·3	76·7	80·3	78·0	69·6	73·9	86·3	73·3	79·6	87·7	79·2	84·1
30	79·4	71·2	76·0				80·5	76·5	78·1	78·6	*68·9*	*73·7*	86·1	76·0	81·8	87·3	81·4	83·5
31	78·2	73·7	76·1				82·7	78·9	80·7				87·2	77·9	82·9			
Mean	74·9	68·6	72·3	80·3	74·7	77·6	82·8	74·3	78·9	84·8	74·7	79·5	86·7	76·9	81·8	88·8	80·2	84·6

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	89·0	80·6	84·1	*96·9*	80·3	88·1	91·9	80·0	85·9	87·0	83·0	84·7	*87·0*	80·9	*83·5*	81·9	74·1	77·6
2	91·0	80·9	85·5	95·6	*76·0*	86·8	92·4	78·7	86·1	89·6	75·4	82·5	84·2	81·5	82·6	83·0	76·3	79·6
3	91·0	78·7	85·3	95·2	77·4	86·9	92·7	76·6	85·2	89·4	75·1	81·4	83·7	82·1	82·9	77·8	69·9	75·1
4	91·1	85·8	87·5	90·3	81·1	86·5	*93·8*	*73·9*	84·0	85·4	79·0	82·2	86·6	79·8	82·9	80·1	68·2	74·1
5	90·7	86·4	88·2	90·7	77·2	84·4	88·7	79·8	84·2	90·4	76·4	82·9	84·1	80·9	82·9	79·7	74·0	75·9
6	88·9	84·1	86·0	86·1	81·0	*83·3*	90·2	74·2	83·7	*91·3*	75·0	81·8	84·1	76·6	81·3	75·4	70·4	72·8
7	91·3	80·4	86·8	88·4	81·7	85·0	90·9	82·8	86·4	83·6	71·4	78·7	84·3	78·8	81·6	78·1	72·1	75·9
8	91·7	78·5	85·5	90·8	81·7	86·7	90·3	81·0	84·5	88·0	82·1	84·3	84·4	76·9	81·8	76·8	72·0	74·1
9	92·3	82·2	86·8	94·4	77·4	86·6	88·1	79·0	83·4	85·7	83·4	84·4	81·7	75·9	78·9	75·8	71·9	73·3
10	92·5	83·5	87·8	95·0	77·8	87·4	86·8	77·2	83·5	87·2	81·7	84·0	79·7	74·6	77·8	78·7	69·8	73·3
11	90·3	80·3	86·1	95·0	80·6	87·7	90·4	86·8	88·6	83·5	78·6	81·4	79·4	70·9	75·3	80·2	71·8	77·7
12	93·7	79·1	87·5	94·1	82·0	87·3	91·8	85·3	*88·9*	85·4	74·4	80·3	79·4	69·4	74·4	80·5	70·8	78·2
13	93·4	83·0	88·1	93·7	82·6	86·9	88·5	83·6	85·5	85·8	71·1	*77·5*	80·0	75·3	78·3	82·1	69·3	78·2
14	92·5	85·0	89·2	94·7	81·9	88·8	87·1	82·0	84·6	87·4	*69·5*	78·0	81·0	74·0	78·2	76·8	*64·6*	*70·8*
15	90·8	84·7	88·0	89·8	83·6	86·3	86·6	83·5	84·8	84·6	77·2	81·0	81·2	70·1	75·8	82·0	76·8	79·6
16	91·7	83·7	87·1	88·5	83·9	85·9	89·7	83·8	87·4	90·1	78·4	82·5	78·1	*68·8*	*73·3*	82·9	79·9	*81·6*
17	91·4	82·2	87·2	91·1	80·7	86·6	88·7	86·2	87·7	90·7	77·3	83·0	79·4	73·2	77·4	*83·2*	78·7	80·7
18	92·0	82·9	88·1	93·4	83·7	88·4	90·9	80·2	86·5	85·0	73·7	79·2	81·3	78·9	79·8	81·9	78·4	80·3
19	93·2	85·0	88·1	89·1	78·8	84·3	87·9	77·9	83·4	85·9	76·0	80·8	80·2	78·2	79·3	80·4	73·2	77·8
20	91·0	84·4	86·9	87·6	81·0	84·3	87·9	79·2	83·2	87·9	76·1	83·1	78·2	77·0	77·5	77·3	71·9	74·7
21	88·3	84·8	86·4	86·0	80·0	84·0	87·1	78·2	82·8	87·8	82·3	*85·9*	81·1	77·4	79·3	78·4	72·7	75·6
22	88·8	83·9	86·1	89·0	80·3	85·6	84·3	80·0	81·8	84·3	78·9	82·1	82·2	79·7	80·7	78·4	75·9	77·3
23	92·2	85·4	87·9	87·6	81·0	85·0	85·3	80·0	82·7	83·5	79·3	82·1	81·1	78·5	79·9	79·1	77·0	78·0
24	92·0	80·0	87·8	90·7	84·4	87·3	86·1	76·9	82·7	85·3	78·2	82·1	80·0	77·8	78·8	79·1	77·3	78·0
25	89·6	76·2	*83·6*	89·3	83·5	85·9	85·5	76·7	*81·3*	84·3	79·7	81·6	83·0	73·3	78·3	78·3	72·6	76·8
26	91·3	77·6	85·1	90·7	81·0	85·8	88·0	80·0	83·0	83·0	78·4	80·9	83·0	69·1	75·8	79·4	72·5	76·2
27	89·7	78·2	84·2	93·8	79·2	86·6	87·5	81·0	83·1	83·7	78·6	80·3	79·0	69·0	75·8	79·8	74·6	77·6
28	91·7	*76·0*	85·0	94·0	82·0	88·2	88·0	77·1	83·1	85·0	78·4	83·0	81·3	75·7	77·9	78·1	71·0	74·1
29	95·1	82·8	88·7	93·7	85·0	*89·3*	86·9	75·0	82·3	85·2	83·2	83·9	81·3	77·9	79·8	78·5	72·1	75·3
30	*95·9*	84·1	*89·9*	86·4	82·4	84·2	87·2	83·0	85·4	85·0	83·2	83·8	81·0	78·0	79·8	75·4	66·9	71·2
31	95·6	80·4	89·6	90·0	81·2	84·8				84·5	83·1	83·9				76·1	69·8	72·4
Mean	91·6	82·0	86·9	91·3	81·0	86·3	88·7	80·0	84·5	86·3	78·0	82·0	81·7	76·0	79·1	79·2	72·8	76·3
									Annual	84·8	76·6	80·8						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

85 ESKDALEMUIR: Louvered hut: h_t = 0·9 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	98·8	6·0	91·4	6·5	70·9	5·6	93·5	9·1	*63·9*	*4·8*	80·3	9·3	75·7	10·0	76·9	13·2	78·5	11·7	90·4	12·4	94·5	*12·0*	94·0	8·0
2	89·5	*8·6*	90·0	6·9	73·1	*4·4*	79·6	7·7	78·1	5·7	86·5	10·4	71·9	10·4	78·6	12·4	76·0	11·5	84·4	11·2	90·0	10·8	87·2	8·5
3	81·9	6·2	83·7	*4·9*	77·3	4·9	75·5	6·5	80·5	6·0	87·7	10·6	83·7	12·0	85·0	13·5	77·0	10·9	94·7	11·3	95·6	11·7	85·7	6·1
4	67·7	4·1	86·6	7·4	84·3	7·5	76·9	7·2	80·4	6·2	84·7	9·9	93·1	15·4	*92·8*	14·4	85·8	11·3	95·5	11·1	93·0	11·3	93·7	6·2
5	74·5	4·6	89·5	7·8	75·0	7·4	85·5	8·7	81·0	6·5	*93·7*	11·4	*96·2*	*16·6*	80·5	10·9	85·0	11·3	87·1	10·6	90·3	11·0	*71·0*	5·3
6	79·5	5·9	90·0	7·5	75·4	7·4	94·3	8·9	86·2	9·9	86·6	12·6	92·3	13·8	71·6	*9·0*	84·9	10·9	*82·2*	9·3	86·1	9·4	75·4	*4·5*
7	*65·0*	3·8	81·9	7·5	72·9	7·9	85·7	8·1	86·0	11·4	91·6	11·7	70·0	12·0	75·3	10·6	85·0	13·1	94·0	8·6	95·6	10·7	71·9	5·4
8	68·8	4·3	93·6	7·5	80·2	7·8	87·3	7·1	87·3	*13·3*	76·2	10·1	82·6	12·0	78·5	12·3	85·4	11·6	86·6	11·6	78·1	8·8	89·0	5·9
9	81·2	4·9	83·6	6·4	79·3	7·4	76·4	6·9	89·5	12·6	87·0	10·7	83·5	13·2	*68·2*	10·6	86·6	10·9	91·2	12·3	80·2	7·5	96·3	6·0
10	80·0	4·5	83·7	5·4	75·3	7·0	66·6	7·1	90·0	11·4	81·7	11·8	73·0	12·3	68·9	11·3	92·0	11·7	95·5	12·5	94·4	8·1	94·9	5·9
11	84·8	5·5	94·4	5·8	75·8	6·7	91·7	8·6	74·6	11·5	93·6	12·4	83·3	12·6	76·7	12·1	*97·8*	*17·3*	91·5	10·1	90·6	6·5	83·7	7·2
12	82·7	5·6	94·7	7·4	88·0	7·3	95·4	10·2	77·4	11·7	81·0	10·6	80·2	13·2	83·6	13·6	92·8	16·8	87·8	9·0	88·5	6·0	86·5	7·7
13	90·0	6·4	86·3	7·2	95·2	8·8	89·2	10·0	92·5	11·2	74·5	9·3	86·4	14·8	85·1	13·5	88·4	12·8	90·5	*7·6*	90·0	6·0	78·2	6·9
14	95·6	5·0	90·7	8·8	92·6	7·9	91·8	10·3	88·6	10·6	77·6	10·2	79·5	14·6	83·4	15·0	83·7	11·4	90·1	7·8	92·1	8·1	94·5	4·9
15	90·9	6·3	92·4	7·7	93·5	8·5	94·0	*11·2*	82·3	10·2	75·5	9·7	89·7	15·3	90·6	13·8	90·3	12·5	95·2	10·2	89·1	6·7	97·0	9·5
16	90·3	8·4	93·7	6·2	88·5	8·5	91·3	11·0	*96·2*	11·8	*66·2*	*8·2*	88·9	14·3	82·5	12·3	96·0	15·8	90·5	10·8	88·2	*5·5*	95·0	*10·6*
17	78·3	5·4	97·5	9·2	84·5	8·3	*97·5*	10·3	79·2	9·7	80·0	9·9	83·0	13·4	87·7	13·7	95·6	16·0	83·2	10·2	91·7	7·7	91·4	9·6
18	89·7	6·8	*98·0*	9·6	93·2	8·8	75·6	9·7	73·9	9·6	83·3	12·9	77·1	13·2	85·7	15·0	92·3	14·3	91·3	8·7	91·5	9·0	86·0	8·8
19	77·3	3·6	97·0	10·2	95·1	9·3	64·7	8·2	67·8	8·2	71·7	13·6	87·6	15·0	76·0	10·2	94·6	11·9	84·4	8·9	95·2	9·1	88·5	7·6
20	80·0	*3·2*	*81·7*	7·3	81·4	7·6	73·9	8·5	83·0	8·8	80·5	*14·6*	89·1	14·1	78·4	10·5	88·2	11·0	91·6	11·3	89·1	7·5	96·7	6·7
21	71·5	3·5	87·9	7·8	95·1	8·9	*57·1*	6·0	76·5	10·8	80·3	12·9	94·2	14·5	89·7	11·8	87·6	10·6	*98·8*	*14·7*	92·5	8·8	90·1	6·6
22	85·8	3·3	84·0	7·9	94·3	9·3	61·0	5·9	89·5	10·1	75·5	12·6	88·0	13·3	85·5	12·5	89·0	10·1	94·1	10·9	91·9	9·7	87·7	7·3
23	92·0	4·3	88·7	6·6	60·6	7·3	69·9	6·5	82·3	9·4	91·7	14·3	85·1	14·4	89·3	12·5	81·8	9·8	93·0	10·8	94·2	9·4	89·5	7·8
24	87·0	3·3	85·2	6·7	*58·2*	7·8	79·5	7·4	73·0	9·1	70·9	10·6	75·3	12·7	80·0	13·0	*73·5*	8·8	89·3	10·3	92·7	8·6	88·9	7·8
25	91·7	3·5	90·5	9·6	82·8	8·4	87·0	8·1	68·7	8·4	80·3	10·2	74·0	*9·5*	70·0	10·4	74·5	*8·2*	86·7	9·6	96·5	8·6	*97·4*	7·8
26	87·7	3·8	88·6	*10·9*	74·7	6·0	76·1	7·4	80·3	8·5	70·5	10·1	74·3	10·5	77·0	11·4	85·5	10·5	89·8	9·6	*75·5*	5·8	93·7	7·2
27	82·0	3·8	86·0	10·1	*98·2*	7·6	59·4	4·9	73·7	7·6	74·9	10·2	71·6	*9·5*	80·3	12·5	89·3	10·9	86·0	8·8	86·5	6·5	84·6	7·2
28	85·4	4·1	91·6	9·1	94·1	9·4	67·1	5·1	78·4	8·0	81·2	11·1	76·0	10·7	85·7	14·8	80·7	10·0	91·0	11·2	83·0	7·2	89·1	5·9
29	*99·3*	3·8			93·6	9·6	73·1	4·8	81·5	7·9	87·5	11·6	81·3	14·5	83·7	*15·5*	85·6	10·0	92·7	12·1	90·9	8·9	80·0	5·8
30	89·0	6·7			81·5	7·2	67·9	*4·4*	85·5	9·7	86·5	11·0	75·0	14·4	84·4	11·2	91·5	13·2	91·5	11·8	*96·9*	9·6	90·7	4·9
31	92·1	7·0			94·9	*10·0*			81·8	10·0			*69·7*	13·2	81·3	11·3			95·4	12·4			87·8	5·1
Mean*	84·2	5·0	89·4	7·7	83·2	7·8	79·5	7·9	81·0	9·4	81·3	11·1	81·9	13·1	81·1	12·4	86·5	11·9	90·5	10·6	90·1	8·5	88·3	6·9

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

86 ESKDALEMUIR: h_t = 0·9 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	85·4	85·7	84·7	85·5	85·2	85·8	86·7	87·1	87·0	*87·8*	86·5	82·1	*78·9*	79·1	*78·9*	80·1	81·9	83·6	85·1	84·9	84·6	84·7	85·0	84·6	85·3	84·2
Feb.	93·9	93·1	93·1	92·6	91·6	92·4	93·2	92·6	91·1	90·7	88·4	86·5	83·8	83·7	*81·7*	82·6	83·5	86·3	87·7	90·3	91·4	91·7	91·0	92·2	*93·9*	89·4
Mar.	89·4	89·8	87·5	88·7	89·6	*90·5*	89·2	90·0	88·5	85·8	79·1	75·5	74·1	*72·6*	*72·6*	72·8	74·6	78·1	79·7	81·9	84·7	86·0	88·1	88·2	89·5	83·2
Apr.	88·6	89·3	89·6	90·0	*91·4*	91·2	87·8	86·3	82·7	77·8	74·2	70·4	65·8	65·5	*64·5*	64·7	67·2	68·3	72·2	79·7	84·0	84·4	85·6	86·7	87·6	79·5
May	90·5	90·7	90·3	90·5	89·9	90·8	87·5	83·7	79·3	76·6	73·5	70·8	71·2	67·9	*66·3*	67·5	71·4	73·6	77·3	81·3	85·5	87·8	88·6	90·2	*91·0*	81·0
June	90·8	89·9	90·0	91·1	*91·3*	89·8	87·0	84·2	79·7	77·3	75·3	73·6	71·9	71·2	*69·8*	70·0	71·4	73·7	76·1	79·2	83·9	85·6	88·5	90·2	91·0	81·3
July	90·8	90·8	91·0	91·4	*92·3*	91·8	89·0	84·9	79·8	77·7	74·5	72·8	*70·1*	71·8	71·7	70·8	71·1	73·7	76·4	79·0	84·9	88·1	89·7	89·9	90·8	81·9
Aug.	90·7	91·0	91·3	90·5	*91·7*	90·8	89·9	86·9	83·1	77·4	72·9	69·9	66·8	*66·6*	68·1	69·5	70·1	73·2	75·1	81·6	84·3	87·0	88·0	89·2	90·5	81·1
Sept.	91·8	91·2	92·8	92·4	93·2	*94·3*	92·7	91·0	89·8	86·8	85·3	79·5	76·9	76·5	76·2	*75·3*	78·0	79·9	84·4	87·5	89·0	90·0	90·5	90·9	92·2	86·5
Oct.	95·2	*95·9*	95·9	95·1	95·2	95·4	95·0	94·5	93·5	90·4	87·5	84·5	82·3	82·1	*80·3*	80·3	83·7	89·1	90·7	92·1	92·2	93·0	94·3	94·7	95·3	90·5
Nov.	*93·4*	92·6	91·9	92·0	92·2	92·8	92·3	92·4	93·2	90·9	89·4	88·1	85·9	84·7	*84·2*	85·0	88·1	89·3	89·4	89·6	90·6	91·2	91·8	92·5	93·3	90·1
Dec.	89·1	89·3	89·3	89·3	89·6	88·7	89·6	90·2	*90·3*	89·4	88·3	86·4	85·2	85·3	*84·7*	85·8	87·3	88·1	88·9	88·8	88·8	88·5	88·7	88·7	88·9	88·3
Annual	90·8	90·8	90·6	90·7	91·1	*91·2*	90·0	88·6	86·5	84·0	81·2	78·3	76·0	75·5	*74·9*	75·3	77·3	79·7	81·9	84·6	87·0	88·1	89·1	89·8	90·7	84·7

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T. computed from corresponding mean values of temperature and relative humidity

87 ESKDALEMUIR: h_t = 0·9 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	4·9	4·9	4·8	4·8	4·7	4·7	4·8	4·8	4·7	*4·7*	4·9	4·9	4·9	5·0	*5·0*	5·0	4·9	4·9	5·0	4·9	4·9	5·0	5·0	4·9	4·9	4·9
Feb.	7·6	7·5	7·5	7·4	7·3	7·4	7·4	7·4	*7·3*	7·5	7·6	7·7	7·7	7·7	7·6	7·6	7·5	7·6	7·6	7·8	7·7	7·8	7·7	7·8	*7·8*	7·6
Mar.	7·3	7·3	*7·1*	7·2	7·2	7·3	7·3	7·4	7·6	8·1	8·1	8·0	8·2	8·2	8·2	8·2	8·2	*8·2*	7·9	7·6	7·8	7·5	7·5	7·4	7·3	7·7
Apr.	7·1	7·1	7·0	7·0	7·0	7·0	7·0	7·5	7·9	8·1	8·2	8·2	8·0	8·2	8·3	8·2	*8·4*	8·4	8·2	8·0	7·7	7·4	7·2	7·0	*6·9*	7·7
May	8·4	8·3	8·3	8·2	*8·2*	8·4	8·7	9·1	9·3	9·4	9·6	9·6	9·7	9·6	9·5	9·6	9·9	9·8	*9·9*	9·8	9·4	9·1	8·8	8·8	8·6	9·2
June	10·6	10·2	10·2	*10·1*	10·2	10·3	10·7	11·1	11·1	11·2	11·2	11·2	11·4	11·6	11·6	11·6	11·5	11·7	*11·7*	11·6	11·5	11·1	10·9	10·7	10·6	11·0
July	12·3	12·0	11·8	*11·6*	11·6	11·8	12·3	12·8	13·0	13·3	13·4	13·5	13·5	13·8	13·9	*13·9*	13·7	13·8	13·8	13·5	13·4	12·9	12·6	12·5	12·3	13·0
Aug.	11·6	11·3	11·1	11·0	10·9	*10·8*	11·1	11·7	12·4	12·6	12·7	13·0	12·8	13·1	13·4	13·7	13·4	*13·9*	13·4	13·3	12·6	12·2	11·8	11·5	11·6	12·4
Sept.	11·0	10·8	10·7	10·5	10·5	10·5	*10·4*	10·8	11·5	12·1	12·7	12·7	12·8	12·8	*12·8*	12·7	12·8	12·7	12·6	12·2	11·8	11·6	11·5	11·2	11·1	11·8
Oct.	9·9	9·9	9·7	9·6	9·5	9·3	*9·2*	9·3	9·8	10·5	11·1	11·4	11·6	*11·8*	11·6	11·5	11·6	11·3	10·8	10·5	10·3	10·1	10·0	9·9	9·8	10·4
Nov.	8·5	8·5	8·3	8·3	8·2	8·2	8·0	*8·0*	8·0	8·2	8·6	8·8	8·9	*9·0*	8·9	8·9	8·7	8·6	8·5	8·4	8·5	8·5	8·4	8·4	8·4	8·5
Dec.	6·8	6·7	6·7	6·7	6·7	*6·6*	6·6	6·6	6·6	6·6	6·7	6·9	7·2	*7·3*	7·2	7·1	7·0	6·9	6·9	6·8	6·7	6·7	6·7	6·7	6·6	6·8
Annual	8·6	8·5	8·4	8·3	*8·3*	8·3	8·4	8·6	8·9	9·1	9·0	9·4	9·5	*9·6*	9·6	9·6	9·5	9·5	9·4	9·2	9·0	8·9	8·8	8·6	8·6	9·0

* Mean of values, 1,2,.....23, ½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

88 ESKDALEMUIR: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of surface above ground = 24·1 m. + 0·6 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	2·8	4·7	2	12·8	8·7	*19*	5·3	3·0	11	*31·7*	*18·5*	17	0·1	···	···	9·1	7·0	30
2	12·3	7·3	10	2·4	4·2	1	···	···	···	4·7	6·5	16	2·9	2·6	6	8·9	4·6	58
3	17·8	9·5	15	6·4	4·8	4	···	···	···	7·1	4·4	12	5·6	4·4	20	4·7	4·4	6
4	0·2	0·1	1	13·8	7·2	9	0·7	1·2	1	1·6	2·3	3	0·1	···	···	5·8	3·1	62
5	0·3	0·6	1	8·7	6·4	15	···	···	···	9·9	6·9	4	3·2	1·9	18	4·7	*10·3*	4
6	0·5	0·3	2	8·6	12·2	2	···	···	···	7·2	12·8	1	10·2	6·1	33	*16·6*	9·6	13
7	0·1	0·1	1	17·9	8·4	6	···	···	···	···	···	···	0·2	0·1	···	5·9	6·4	22
8	0·4	0·7	2	6·1	8·2	4	···	···	···	0·1	0·2	1	4·5	3·4	18	6·3	3·6	55
9	3·8	4·2	3	18·1	9·0	8	···	···	···	0·1	···	···	1·4	1·4	4	12·0	7·6	47
10	1·9	1·5	6	0·5	0·5	2	···	···	···	···	···	···	···	···	···	0·9	2·0	2
11	4·8	3·5	3	3·5	6·6	3	···	···	···	13·0	9·7	8	···	···	···	3·0	4·0	16
12	0·3	···	···	19·5	10·8	8	···	···	···	1·9	4·1	1	···	···	···	2·3	1·4	68
13	0·2	···	···	3·2	2·4	6	0·1	0·1	1	0·1	···	···	22·6	9·7	*59*	···	···	···
14	···	···	···	6·6	11·9	2	0·5	1·0	···	8·1	11·7	17	9·5	9·3	14	2·6	2·7	18
15	0·6	1·0	1	0·1	···	···	0·7	0·3	5	3·3	9·0	*3*	1·9	4·1	4	3·1	6·0	23
16	2·1	3·4	1	2·4	*6·3*	8	1·2	2·4	2	···	···	···	*30·0*	*19·5*	9	···	···	···
17	21·8	8·9	10	9·3	*17·0*	8	0·6	0·9	2	0·6	5·0	···	17·4	9·3	7	···	···	···
18	*24·6*	*16·2*	9	2·2	6·9	3	12·2	11·0	8	0·2	1·0	···	···	···	···	0·3	0·5	1
19	1·3	5·0	···	10·4	9·6	10	24·3	15·5	18	···	···	···	···	···	···	···	···	···
20	0·3	···	···	5·7	4·1	5	1·5	2·0	···	1·0	0·4	*32*	13·9	7·3	9	7·9	2·1	53
21	0·1	···	···	0·7	2·3	1	0·5	2·2	···	···	···	···	···	···	···	0·5	1·2	2
22	2·7	0·9	6	4·6	8·5	1	···	···	···	···	···	···	13·6	16·7	4	6·4	1·5	*137*
23	···	···	···	1·6	2·4	2	···	···	···	···	···	···	···	···	···	2·1	4·5	9
24	···	···	···	5·1	3·4	9	···	···	···	···	···	···	···	···	···	···	···	···
25	···	···	···	*20·2*	16·8	9	3·6	4·9	7	···	···	···	0·9	0·9	5	3·7	7·7	3
26	···	···	···	16·4	11·9	9	···	···	···	···	···	···	5·8	7·0	8	2·1	4·3	3
27	0·4	0·2	1	0·2	0·3	···	7·2	4·8	12	···	···	···	···	···	···	2·2	1·6	6
28	0·4	0·3	1	0·8	0·8	2	3·6	4·4	6	0·1	0·1	1	3·7	9·0	2	···	···	···
29	15·4	7·0	*18*				17·9	13·9	9	0·9	0·8	3	5·0	3·8	11	9·4	5·0	46
30	23·9	9·7	8				10·7	5·2	*26*	0·2	0·3	···	0·3	0·4	2	11·0	8·4	36
31	19·5	8·9	9				*25·4*	*19·0*	17				3·4	3·6	12			
Total	158·5	94·0	-	207·8	191·6	-	116·0	91·8	-	91·8	93·7	-	156·2	120·5	-	131·5	109·5	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	0·9	1·1	8	···	···	···	···	···	···	···	···	···	1·8	*6·0*	1	0·5	0·7	2
2	···	···	···	···	···	···	···	···	···	0·1	0·4	···	0·2	0·9	1	9·3	6·1	*39*
3	···	···	···	···	···	···	···	···	···	0·5	0·7	···	0·7	2·1	2	0·7	0·6	2
4	1·3	8·1	1	0·7	0·9	10	···	···	···	0·4	0·6	1	0·4	1·6	1	4·4	5·9	6
5	3·8	9·7	3	4·8	1·1	*61*	···	···	···	···	···	···	···	···	···	0·2	0·2	1
6	1·5	5·6	4	2·5	3·2	5	···	···	···	···	···	···	···	···	···	···	···	···
7	···	···	···	1·0	1·5	···	···	···	···	···	···	···	1·7	4·7	2	0·1	···	···
8	0·5	0·4	9	0·2	0·1	1	···	···	···	0·5	0·7	1	0·1	0·6	···	5·6	7·3	5
9	*23·5*	4·2	63	···	···	···	···	···	···	3·6	3·5	36	0·2	0·8	1	1·5	3·6	2
10	···	···	···	···	···	···	5·6	8·5	7	28·7	15·1	49	0·2	0·1	2	···	···	···
11	0·9	0·8	2	···	···	···	15·8	13·1	*113*	···	···	···	0·1	0·3	1	0·1	···	···
12	···	···	···	···	···	···	16·7	8·4	55	···	···	···	···	···	···	0·1	···	···
13	0·1	0·2	···	···	···	···	14·3	11·7	30	···	···	···	0·3	···	···	···	···	···
14	7·0	3·6	*68*	···	···	···	3·7	2·2	19	···	···	···	0·2	···	···	0·2	···	···
15	···	···	···	10·0	5·3	9	1·5	3·0	7	0·2	···	···	···	···	···	3·8	7·3	7
16	6·2	3·2	46	1·3	1·6	2	*39·0*	*20·9*	36	0·1	···	···	···	···	···	6·4	8·6	16
17	0·3	0·3	4	···	···	···	4·7	7·9	9	0·1	···	···	···	···	···	*23·2*	*12·2*	*39*
18	0·4	1·5	···	···	···	···	···	···	···	···	···	···	0·6	0·7	2	6·0	4·4	18
19	15·7	8·9	52	···	···	···	12·4	7·9	10	···	···	···	0·9	2·2	2	3·1	4·6	3
20	21·5	8·9	42	···	···	···	5·5	1·6	40	0·3	0·6	1	0·1	···	···	1·6	1·5	7
21	13·5	*12·1*	25	5·8	6·7	8	3·5	1·8	67	8·2	17·5	5	···	···	···	···	···	···
22	2·6	3·4	5	2·9	2·2	11	37·9	15·2	76	24·7	8·2	*69*	*2·9*	1·7	*36*	3·1	2·7	3
23	···	···	···	3·2	6·0	8	8·5	7·0	9	11·6	10·4	34	2·5	1·2	12	2·8	5·8	5
24	···	···	···	*15·7*	*8·6*	26	1·0	0·6	1	*30·7*	18·7	35	···	···	···	4·6	7·9	2
25	···	···	···	···	···	···	···	···	···	8·3	6·0	52	2·6	3·9	1	0·2	0·2	1
26	···	···	···	···	···	···	1·2	2·0	2	2·5	7·0	2	1·1	1·6	2	10·1	2·6	26
27	0·1	0·2	1	···	···	···	5·1	6·2	9	0·1	···	···	0·6	0·6	1	0·5	0·7	8
28	···	···	···	2·6	3·8	4	0·4	1·9	1	13·1	15·5	13	0·4	0·7	1	···	···	···
29	···	···	···	0·1	···	···	···	···	···	1·4	3·2	1	0·2	···	···	···	···	···
30	···	···	···	0·1	0·5	1	0·2	0·4	1	1·6	6·1	1	0·1	0·2	1	···	···	···
31	···	···	···	···	···	···				18·0	*20·1*	8				···	···	···
Total	99·8	72·2	-	50·9	41·5	-	177·0	120·3	-	154·7	134·3	-	17·9	29·9	-	88·1	82·9	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

89 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	7·5	9·6	7·8	4·9	3·4	4·1	8·0	9·0	6·9	8·3	2·3	0·6	2·0	2·2	3·4	5·4	7·3	*11·8*	8·3	7·7	10·6	9·1	9·2	9·1	158·5
Feb.	11·2	8·5	*18·5*	14·9	8·7	7·7	2·8	2·1	2·5	6·3	4·3	4·6	2·6	9·2	7·5	8·0	10·3	11·5	9·1	11·6	9·3	9·8	15·2	11·6	207·8
Mar.	2·7	1·7	2·2	2·2	1·7	2·5	2·6	2·9	2·6	3·9	4·6	3·9	4·9	8·0	2·9	9·6	*13·9*	12·8	12·7	6·6	4·5	1·4	3·6	1·6	116·0
Apr.	3·8	6·4	5·0	6·0	5·5	4·2	4·1	3·9	4·3	*8·8*	4·6	2·2	4·2	8·1	5·6	5·4	3·4	0·8	1·0	0·2	0·5	1·0	1·0	1·8	91·8
May	7·8	7·0	6·9	2·8	4·3	5·4	1·8	3·3	6·6	10·6	8·8	8·5	8·0	4·9	5·0	8·5	*14·3*	10·1	9·1	4·5	8·1	3·0	3·6	3·3	156·2
June	3·6	4·7	6·5	6·2	5·9	5·7	1·4	3·9	4·2	7·7	7·0	7·6	5·4	5·4	1·1	4·5	7·6	2·4	7·8	3·4	8·4	5·4	*9·6*	6·1	131·5
July	3·7	2·3	6·3	9·3	9·1	2·2	5·0	1·0	4·7	1·9	0·9	2·0	3·1	2·5	2·1	2·6	4·4	*12·1*	10·4	6·5	2·2	1·0	3·5	1·0	99·8
Aug.	4·2	6·1	2·3	0·9	1·2	2·0	1·4	1·7	0·5	1·0	0·8	0·8	2·3	1·4	*6·5*	4·4	3·8	2·6	2·5	2·7	0·2	0·2	0·4	1·0	50·9
Sept.	2·5	5·1	7·9	7·1	13·8	6·3	9·5	10·6	6·1	6·3	3·8	1·8	8·0	6·8	8·6	5·5	6·1	12·5	6·4	*19·2*	8·0	5·0	4·0	6·1	177·0
Oct.	2·4	1·4	2·4	3·9	3·6	8·4	4·9	5·6	8·3	10·1	6·2	6·5	14·0	*15·3*	13·9	8·6	8·1	4·0	3·1	3·2	4·0	3·9	4·7	8·2	154·7
Nov.	1·6	0·6	0·5	0·9	0·4	0·2	0·3	0·1	0·4	0·2	2·0	0·6	0·3	1·0	1·0	0·4	1·1	0·1	0·5	0·8	1·1	1·2	1·4	1·2	17·9
Dec.	1·6	3·5	3·2	5·8	6·8	5·4	4·9	2·2	1·8	5·0	2·9	4·6	1·0	5·6	1·4	1·9	4·3	1·6	3·2	2·9	4·8	*7·1*	2·2	4·4	88·1
Annual	52·6	56·9	69·5	64·9	64·4	54·1	46·7	46·3	48·9	70·1	48·2	*43·7*	55·8	70·4	59·0	64·8	*84·6*	82·3	74·1	69·3	61·7	48·1	58·4	55·4	1450·2

RAINFALL

90 ESKDALEMUIR: h_r = 242·0 m. + 0·4 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	4·1	4·6	4·8	3·0	3·6	3·1	4·7	4·3	5·6	3·7	2·2	0·5	2·3	1·7	1·6	3·6	4·4	6·0	4·0	4·6	*6·2*	5·8	5·0	4·6	94·0
Feb.	10·5	9·4	9·0	9·1	7·5	7·2	2·8	5·0	4·3	5·7	7·1	8·0	6·0	8·3	6·6	6·7	8·7	9·8	8·8	9·2	10·5	*11·9*	11·3	8·2	191·6
Mar.	2·9	2·0	1·8	3·8	3·6	3·1	4·0	4·2	4·5	2·9	4·7	3·9	3·7	1·2	3·0	4·7	5·3	*5·9*	5·0	3·9	5·6	3·9	4·1	4·1	91·8
Apr.	4·0	4·0	4·0	6·6	6·5	5·4	5·6	5·0	*6·7*	5·9	3·5	4·5	4·0	3·6	3·9	4·2	3·9	1·6	1·3	1·0	1·0	2·0	2·2	3·3	93·7
May	3·2	3·8	4·6	4·9	4·6	5·3	3·1	4·1	5·6	7·3	6·5	5·7	4·5	3·1	3·5	5·8	*8·2*	7·4	7·2	6·3	6·8	3·6	3·4	2·0	120·5
June	4·8	6·1	6·3	*6·5*	3·3	3·3	3·4	4·2	6·2	5·5	5·3	4·6	3·6	2·6	1·7	4·9	4·9	4·0	4·7	4·6	3·5	4·3	5·0	6·2	109·5
July	5·2	*6·3*	4·3	5·5	6·2	3·1	3·3	2·7	3·8	2·0	1·2	0·7	0·6	1·8	2·2	2·7	3·1	2·1	4·4	3·2	1·3	1·5	2·5	2·5	72·2
Aug.	2·1	1·7	1·6	1·1	1·6	1·0	1·0	2·0	0·9	1·2	1·0	1·4	2·2	2·3	3·2	*3·5*	2·5	3·0	2·6	2·6	1·0	0·2	0·8	1·0	41·5
Sept.	4·1	4·6	4·7	*7·5*	6·1	4·5	6·1	6·7	5·6	5·5	5·2	3·2	5·1	4·6	4·4	3·4	2·4	5·4	6·5	6·7	4·2	5·1	4·0	4·7	120·3
Oct.	3·1	4·0	5·8	6·3	6·6	*7·8*	4·2	6·1	5·2	6·7	6·0	4·0	7·1	7·3	7·0	6·8	5·6	5·3	5·7	4·9	6·0	4·8	3·2	4·8	134·3
Nov.	*3·7*	1·5	2·7	1·0	1·1	1·0	1·0	0·0	0·3	0·1	0·6	0·6	1·0	1·1	1·0	1·1	0·7	0·6	0·5	1·2	1·3	1·6	2·7	3·5	29·9
Dec.	2·1	4·2	3·4	3·7	*6·2*	5·1	4·0	4·7	3·0	4·0	1·7	4·1	1·4	4·7	3·0	2·7	3·0	1·8	3·7	3·5	4·2	4·6	2·7	1·4	82·9
Annual	49·8	52·2	53·0	*59·0*	56·9	49·9	43·2	49·0	51·7	50·5	45·0	41·2	41·5	42·3	*41·1*	50·1	52·7	52·9	54·4	51·7	51·6	49·3	46·9	46·3	1182·2

NOTES ON RAINFALL

91 ESKDALEMUIR: 1945

Dry Periods

The following definitions are adopted by the British Rainfall Organization
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought" No occasions
"Partial drought" No occasions
"Dry spell" No occasions

Wet Periods

The following definitions are adopted by the British Rainfall Organization
A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

"Rain spell" January 27–February 14 and May 28–June 12
"Wet spell" No occasions

Rainfall Duration

There were 136 days on which no duration of rainfall was registered. The day with the greatest duration was September 16, when the duration was 20·9 hr., the amount falling being 39·0 mm. The longest continuous fall, 24·8 hr., occurred on May 16–17, 46·3 mm. being recorded.

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	55	24	67	62	21

Notable Falls of the Year

The greatest amount in a 60-min. period was 11·8 mm. which was recorded between 17h.5m. and 18h.5m. on July 9; on this occasion 8 mm. of rain fell in 30 min. Falls of 5 mm. in 1 hr. or less occurred on 14 days.

Details of the greatest continuous falls are as follows

	January 29–30	March 31–April 1	May 16–17	October 10	October 31–November 1
Amount (mm.)	39·3	30·6	46·3	28·7	17·9
Duration of rainfall (hr.)	16·7	15·0	24·8	15·1	20·5

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded was 137 mm./hr. at 22h.40m. on June 22. The maximum rate exceeded 50 mm./hr. on May 13, June 2,4,8,12,20 and 22, July 9,14 and 19, August 5, September 11,12,21 and 22 and October 22 and 25.

DURATION OF BRIGHT SUNSHINE AND PERCENTAGE OF POSSIBLE FOR EACH DAY

92 ESKDALEMUIR: h_s(height of recorder above ground) = 1·5 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible	Duration	Per cent. of possible
	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%	hr.	%
1	···	···	0·1	1	6·2	58	···	···	5·5	36	4·7	28	3·2	30	9·9	62	4·2	31	1·2	10	4·4	48	···	···
2	···	···	0·6	7	7·7	72	5·0	38	4·7	31	7·2	42	3·6	21	13·2	83	*11·3*	*82*	8·7	76	···	···	0·8	11
3	0·7	10	3·9	45	1·1	10	7·6	58	5·1	33	2·9	17	3·0	17	9·7	61	11·2	82	4·2	37	···	···	2·4	33
4	3·7	51	5·7	65	0·6	6	4·2	32	7·1	46	8·3	49	1·6	9	2·8	18	5·8	43	···	···	1·9	21	···	···
5	5·2	72	0·7	8	5·2	48	5·6	42	0·4	3	···	···	0·1	1	6·8	43	1·0	7	8·0	71	···	···	*5·0*	*68*
6	2·5	34	···	···	0·3	3	···	···	2·9	19	6·6	39	1·9	11	2·1	13	2·7	20	*8·8*	79	1·3	15	···	···
7	5·5	75	2·3	25	0·3	3	6·6	49	0·7	4	0·9	5	7·0	41	6·7	43	1·5	11	0·9	8	···	···	···	···
8	4·7	64	···	···	4·3	38	7·2	53	2·4	15	5·3	31	4·9	29	6·6	43	2·8	21	3·8	35	5·4	62	···	···
9	4·4	60	3·0	33	···	···	8·4	62	5·4	34	1·8	10	2·9	17	12·9	84	···	···	0·5	5	1·8	21	···	···
10	5·6	76	3·2	35	0·1	1	5·3	39	3·1	20	2·2	13	7·4	44	*13·5*	*88*	···	···	···	···	0·4	5	4·0	56
11	1·5	20	···	···	3·8	33	···	···	8·6	54	1·1	6	0·6	4	13·4	88	···	···	···	···	4·3	50	1·0	14
12	0·8	11	···	···	1·7	15	···	···	7·8	49	5·6	32	7·0	41	8·9	59	···	···	3·1	29	3·2	38	···	···
13	···	···	4·7	50	···	···	6·2	45	1·6	10	2·4	14	0·4	2	9·2	61	2·3	18	7·0	66	0·9	11	3·0	42
14	3·3	43	···	···	···	···	0·1	1	1·1	7	5·5	32	8·1	48	5·9	39	4·9	38	8·5	81	1·2	14	···	···
15	···	···	3·7	39	···	···	1·3	9	4·4	27	9·4	54	0·1	1	···	···	···	···	1·1	10	5·4	65	···	···
16	0·3	4	···	···	1·3	11	2·2	16	···	···	6·3	36	2·1	13	0·2	1	···	···	6·1	59	3·8	46	···	···
17	2·3	30	···	···	1·1	10	0·2	1	7·1	44	5·9	34	0·9	5	1·8	12	···	···	8·7	*84*	···	···	···	···
18	···	···	···	···	···	···	10·3	72	*10·7*	*66*	4·7	27	1·8	11	9·5	64	2·2	18	3·1	30	0·2	2	···	···
19	3·9	50	···	···	···	···	*12·6*	*88*	9·5	58	12·4	71	3·6	22	1·8	12	···	···	6·4	63	···	···	1·1	16
20	···	···	*7·1*	*71*	6·7	55	5·9	41	0·2	1	4·8	28	4·0	24	···	···	2·9	23	0·9	9	···	···	0·5	7
21	*6·9*	*87*	0·9	9	···	···	7·4	51	4·9	30	3·4	20	0·2	1	0·1	1	1·8	14	···	···	···	···	···	···
22	4·5	56	3·9	39	0·1	1	8·4	58	···	···	11·1	63	0·3	2	3·7	26	1·0	8	0·2	2	···	···	···	···
23	0·3	4	4·1	40	*10·0*	*81*	12·2	83	6·5	39	2·7	16	7·3	44	0·6	4	0·6	5	···	···	···	···	0·1	1
24	4·9	60	0·5	5	8·1	65	10·5	71	*10·7*	64	*12·8*	*74*	*13·6*	83	5·3	37	5·5	46	0·6	6	···	···	···	···
25	4·6	56	0·2	2	0·3	2	3·1	21	4·9	29	1·6	9	5·1	31	9·8	69	1·5	13	1·5	15	···	···	···	···
26	5·2	63	0·6	6	5·7	45	6·0	40	1·4	8	7·1	41	7·2	44	10·8	76	2·6	22	0·7	7	1·8	23	···	···
27	5·1	62	0·7	7	···	···	8·1	54	4·6	27	3·7	21	8·1	50	9·3	66	0·8	7	3·4	35	2·7	35	2·0	28
28	4·1	49	0·1	1	···	···	8·4	56	3·6	21	1·6	9	8·6	53	2·7	19	5·1	43	···	···	*5·7*	*75*	1·7	24
29	···	···			···	···	9·3	62	2·0	12	0·1	1	5·1	32	1·6	11	0·8	7	···	···	0·3	4	3·5	50
30	0·4	5			3·9	30	7·0	46	3·9	23	2·3	13	7·5	47	···	···	···	···	0·5	5	···	···	1·5	21
31	0·9	11			···	···			3·0	18			13·3	*83*	2·2	16			···	···			3·6	51
Mean	2·62	–	1·64	–	2·21	–	5·64	–	4·32	–	4·81	–	4·60	–	5·84	–	2·42	–	2·84	–	1·49	–	0·97	–
											Annual mean		3·29	–										

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

93 ESKDALEMUIR: h_s = 1·5 m. 1945

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	–	–	–	–	···	1·2	10·6	*15·1*	14·9	13·7	13·3	10·5	2·0	···	–	–	–	–	81·3	34
Feb.	–	–	–	···	···	4·1	5·6	6·8	*7·1*	6·9	6·5	6·1	2·5	0·4	···	–	–	–	46·0	17
Mar.	–	–	···	0·1	2·6	5·6	6·5	7·2	9·1	*10·6*	9·5	7·6	5·9	3·8	···	···	–	–	68·5	19
Apr.	–	···	2·5	7·5	11·1	13·6	13·3	12·7	14·6	15·9	*18·9*	17·3	14·6	15·0	10·4	1·7	···	–	169·1	40
May	···	0·2	3·0	7·6	10·0	7·6	8·5	9·7	10·4	10·8	*13·5*	13·2	11·9	11·8	10·5	4·8	0·3	···	133·8	27
June	···	0·3	5·0	9·1	9·3	8·8	9·5	9·4	10·4	13·4	*14·0*	13·2	11·7	11·8	10·3	7·4	0·8	···	144·4	28
July	···	0·3	5·6	6·5	8·0	8·3	9·8	11·6	12·8	11·1	*13·7*	13·1	12·7	10·1	10·9	6·9	1·1	···	142·5	27
Aug.	–	···	3·1	8·0	11·1	14·4	16·6	*17·9*	17·5	16·1	14·4	14·1	14·4	16·9	11·8	4·7	···	–	181·0	39
Sept.	–	–	···	1·3	2·4	5·1	5·3	9·0	*9·5*	7·9	7·9	9·2	8·0	5·7	1·2	···	–	–	72·5	19
Oct.	–	–	–	···	0·8	7·3	8·1	10·7	*11·7*	11·0	11·3	11·6	10·9	4·5	···	–	–	–	87·9	27
Nov.	–	–	–	–	···	1·4	4·1	7·3	8·0	8·2	*9·1*	5·7	0·9	···	–	–	–	–	44·7	18
Dec.	–	–	–	–	–	0·1	3·1	5·6	6·3	*7·1*	5·3	2·6	0·1	–	–	–	–	–	30·2	13
Annual	···	0·8	19·2	40·1	55·3	77·5	101·0	123·0	132·3	132·7	*137·4*	124·2	95·6	80·0	55·1	25·5	2·2	···	1201·9	27

WIND

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

94 ESKDALEMUIR: h_a(height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 235 m. + 15 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	1·1	4	3·6	14	6·5	23	*7·9*	*25*	4·2	10	*8·6*	19	3·0	14	1·2	7	1·5	6	2·0	7	2·7	13	2·1	12
2	6·1	22	3·6	15	1·5	9	5·3	20	2·0	12	7·3	16	2·8	11	2·3	9	1·8	8	1·1	7	3·6	14	6·8	21
3	7·3	23	2·6	12	2·1	13	6·1	21	*1·3*	8	3·6	12	3·5	11	1·8	8	1·2	7	0·6	5	2·7	10	3·6	15
4	9·6	23	3·8	23	4·1	21	4·4	15	1·7	9	4·9	22	4·6	11	3·7	13	2·3	11	0·9	5	1·1	6	2·7	18
5	2·9	16	6·0	20	4·7	18	3·4	14	3·8	15	3·0	9	5·4	13	2·1	12	2·4	9	1·2	8	2·6	11	6·0	19
6	3·2	19	4·4	18	5·7	13	*0·5*	5	3·5	14	6·9	17	5·1	12	7·0	20	0·7	4	1·0	7	1·0	6	1·6	13
7	9·4	24	11·0	*30*	6·9	22	1·7	9	1·3	7	7·1	24	2·5	12	7·5	19	0·7	5	2·5	13	4·8	19	0·9	5
8	*11·2*	22	5·9	9	1·1	16	2·1	9	2·3	8	7·1	21	2·4	13	3·6	11	*0·4*	3	4·3	16	*6·4*	*23*	3·6	12
9	5·8	21	6·9	19	1·4	10	*	9	6·5	21	5·8	19	3·4	15	1·6	7	1·3	5	7·4	17	3·5	14	1·6	8
10	4·4	15	4·7	17	*1·0*	7	*	16	5·3	17	1·5	8	2·3	11	1·7	8	3·6	11	5·2	16	2·2	9	0·8	9
11	6·2	17	1·6	9	1·8	11	4·9	17	2·0	13	5·5	16	*0·8*	6	3·1	10	5·7	18	2·6	11	2·3	10	2·4	14
12	7·5	19	2·9	18	4·3	15	2·6	11	3·2	9	4·5	17	2·1	10	3·8	9	6·8	23	0·7	5	2·0	9	3·5	21
13	4·3	16	7·6	20	2·5	8	2·0	7	7·0	22	8·1	25	3·4	13	3·3	9	7·2	19	1·3	3	3·0	12	5·1	19
14	0·6	8	8·8	24	5·2	13	6·3	21	9·0	22	5·7	20	5·2	16	1·8	8	6·3	16	0·6	4	2·8	9	1·3	8
15	1·8	13	3·1	12	4·4	15	5·8	17	9·7	*23*	8·4	*25*	3·4	18	1·7	14	6·7	17	2·3	10	1·0	6	3·4	11
16	7·1	28	*0·8*	7	5·6	21	4·2	15	*9·9*	19	2·5	10	5·6	*23*	4·6	19	6·7	19	1·1	4	1·0	11	8·9	22
17	4·8	28	4·0	16	3·4	12	4·5	12	4·3	14	6·0	21	2·8	11	*0·5*	4	6·9	17	0·9	7	3·0	11	7·9	20
18	8·4	*33*†	5·3	13	8·4	19	3·7	16	2·4	10	7·0	17	3·8	12	2·9	9	1·3	7	*0·2*	3	4·2	13	*9·0*	*26*
19	7·9	18	6·2	19	8·9	23	1·4	9	5·2	16	2·7	12	3·6	13	1·8	8	2·7	13	1·8	9	2·9	8	4·9	18
20	4·9	17	4·5	17	8·6	25	2·8	19	4·6	17	5·5	18	7·2	17	0·7	5	4·4	*30*	1·6	5	1·1	5	1·4	7
21	4·7	13	9·0	21	6·1	16	4·4	14	1·3	10	3·7	14	6·0	15	3·9	13	5·3	19	2·1	8	*0·3*	2	4·5	17
22	0·3	4	2·9	13	5·5	17	3·4	13	4·2	12	2·1	16	5·4	18	3·7	14	*11·1*	29	3·0	14	1·0	4	5·6	16
23	*0·2*	2	2·0	15	2·9	17	1·6	7	4·0	14	4·1	17	6·0	19	4·9	19	9·1	23	6·0	19	1·5	6	6·0	17
24	0·7	5	11·5	29	3·4	16	2·1	10	3·2	11	2·7	12	2·8	10	*8·3*	21	5·5	18	7·2	*22*	0·7	3	4·5	17
25	1·7	7	11·6	23	2·2	14	3·3	12	3·6	14	2·6	11	1·9	10	7·8	*23*	2·1	9	*10·0*	22	2·9	15	*0·7*	3
26	1·8	9	*12·3*	27	1·4	9	2·4	12	2·3	10	3·1	14	1·7	7	2·1	9	4·0	14	3·5	14	3·2	15	2·0	13
27	4·3	13	5·3	18	3·9	16	3·4	17	2·8	11	3·1	13	3·4	15	1·7	10	3·0	7	2·8	15	4·5	15	5·7	15
28	2·7	14	9·5	29	2·3	10	6·5	23	1·6	9	1·6	7	2·2	13	1·5	7	2·8	13	4·6	18	3·1	13	1·8	8
29	2·1	10			5·9	19	7·4	20	1·8	11	*1·4*	8	3·3	15	1·7	15	2·3	9	3·0	12	5·7	16	3·1	11
30	8·2	27			8·5	22	6·0	16	5·7	16	4·8	14	2·4	11	3·0	12	3·1	10	3·8	14	2·0	8	0·8	4
31	4·6	23			*13·7*	*27*			6·3	19			2·4	10	1·8	7			7·4	15			0·8	5

* No record, anemometer under test 9th and 10th.

† Highest recorded, pressure tube partly blocked by snow later.

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

95 ESKDALEMUIR: h_a = 235 m. + 15 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	*5·7*	5·5	5·4	4·7	4·4	4·4	4·3	4·0	*3·6*	3·7	4·0	4·2	4·7	4·3	4·9	4·8	4·7	4·4	4·5	4·9	5·2	5·4	5·5	5·6	4·7
Feb.	5·0	4·9	*4·8*	4·9	5·0	4·9	5·3	5·4	5·1	5·8	6·2	6·4	7·0	*7·2*	7·1	6·8	6·0	5·9	6·0	5·6	5·5	6·0	5·8	5·7	5·8
Mar.	3·2	3·4	3·6	3·8	3·9	4·1	3·9	4·1	4·6	5·3	6·0	6·3	6·7	*6·8*	6·4	6·5	6·1	5·3	4·4	3·7	3·5	3·4	3·3	*3·2*	4·6
Apr.	3·2	3·0	2·9	2·9	2·9	3·2	3·5	3·9	4·2	4·6	4·6	4·8	5·4	*5·6*	5·4	5·2	5·2	4·7	4·4	3·2	*2·6*	3·0	3·1	3·0	3·9
May	2·8	2·7	*2·6*	2·7	2·7	2·8	3·3	3·5	4·0	4·4	4·9	5·3	5·7	5·7	*5·8*	5·6	5·5	5·4	4·6	4·2	3·6	3·4	3·2	3·1	4·1
June	3·1	3·0	*2·9*	3·0	3·2	3·6	4·2	4·7	5·0	5·7	6·2	6·2	*6·8*	6·7	6·5	6·5	6·2	5·9	5·2	4·3	4·0	3·5	3·3	3·1	4·7
July	2·6	2·6	2·6	2·4	2·4	2·3	2·6	3·1	3·8	4·4	4·8	4·7	*5·0*	4·8	4·9	4·9	4·9	4·3	4·1	3·8	3·2	2·8	2·4	*2·3*	3·6
Aug.	2·2	*2·0*	2·2	2·3	2·4	2·2	2·4	2·9	3·6	4·3	*4·5*	4·5	4·3	4·2	4·1	4·1	3·9	3·7	3·1	2·6	2·4	2·5	2·5	2·4	3·1
Sept.	3·4	3·5	3·4	3·4	3·5	3·4	*3·3*	3·5	3·7	4·2	4·6	*5·1*	4·9	4·9	4·8	4·6	4·2	4·1	3·5	3·7	3·9	3·8	3·9	3·6	4·0
Oct.	2·3	2·5	2·4	2·4	2·5	2·3	*2·2*	2·4	2·4	3·1	3·6	3·9	4·3	*4·3*	4·1	3·9	3·5	3·3	3·1	3·2	2·8	2·6	2·3	2·4	3·0
Nov.	2·6	2·4	2·5	2·4	2·3	2·4	2·2	*2·1*	2·2	2·5	2·7	3·0	3·1	*3·4*	3·2	3·2	3·0	2·6	2·7	2·8	2·7	2·3	2·3	2·4	2·6
Dec.	3·6	4·0	4·0	3·8	3·6	3·7	3·4	3·2	*3·1*	3·4	3·6	4·0	*4·4*	4·1	3·7	3·5	3·3	3·4	3·5	3·5	3·6	3·5	3·8	3·9	3·7
Annual	3·3	3·3	3·3	*3·2*	3·2	3·3	3·4	3·5	3·8	4·3	4·6	4·9	*5·2*	5·1	5·1	4·9	4·7	4·4	4·1	3·8	3·6	3·5	3·4	3·4	4·0

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

96 ESKDALEMUIR: h_a = 235 m. + 15 m. 1945

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	12	74	211	258	201	0	10	16	18 21	33*	18 20 15
Feb.	24, 28	5	9	82	258	209	118	0	240	20	24 17	30	7 15 55
Mar.	–	0	8	48	248	271	177	0	250	16	31 12	27	31 12 30
Apr.	–	0	3	14	174	343	174	15	240	13	1 5	25	1 6 10
May	–	0	6	30	184	310	220	0	{200 220	13	{13 13 15 15	23	15 10 15
June	–	0	5	20	250	313	137	0	200	15	7 14	25	15 7 55
July	–	0	1	1	96	429	218	0	250	12	16 17	23	16 18 10
Aug.	–	0	2	2	78	407	257	0	280	11	25 14	23	25 8 50
Sept.	22	1	6	14	192	298	215	0	220	19	22 7	30	20 17 10
Oct.	–	0	3	17	92	333	302	0	240	13	25 3	22	24 20 10
Nov.	–	0	1	2	59	394	265	0	300	12	8 6	23	8 6 5
Dec.	–	0	5	21	166	338	219	0	190	15	18 12	26	18 11 10
Year	3	6	61	325	2008	3903	2503	15	240	20	Feb. 24 17	33	Jan. 18 20 15

* Highest recorded, pressure tube partly blocked by snow later.

TEMPERATURE IN THE GROUND AT DEPTHS OF 30 CM. (1ft.) AND 122 CM. (4ft.) AT 9h., G.M.T.

97 ESKDALEMUIR 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
	degrees Absolute																							
1	*	79·2	74·4	77·3	79·0	78·1	79·2	79·1	80·1	80·5	83·7	82·0	86·3	83·9	88·9	85·2	87·4	85·8	84·4	85·1	83·5	83·6	79·7	81·8
2	76·1	79·2	74·3	77·2	78·2	78·2	79·8	79·2	80·1	80·6	83·9	82·1	86·4	83·9	89·2	85·2	87·6	85·8	85·0	85·0	83·5	83·5	79·8	81·9
3	75·5	79·0	74·2	77·3	77·3	78·3	79·9	79·3	80·1	80·6	84·0	82·1	86·8	84·0	89·2	85·3	87·7	85·7	85·0	84·9	83·2	83·4	79·8	82·0
4	75·7	78·9	74·2	77·4	77·0	78·4	79·8	79·2	80·1	80·6	84·1	82·3	87·0	83·9	89·4	85·4	87·3	85·7	85·1	85·0	83·3	83·5	79·0	81·6
5	75·9	78·8	74·2	77·4	77·0	78·1	80·0	79·3	80·1	80·2	84·2	82·2	87·2	83·9	89·0	85·4	87·2	85·7	85·0	84·9	83·4	83·6	78·9	81·6
6	75·8	78·9	74·5	77·3	77·6	78·1	79·9	79·3	80·3	80·5	84·3	82·2	87·6	84·0	88·8	85·5	87·0	85·5	84·7	84·9	83·0	83·3	78·1	81·8
7	76·0	79·1	74·4	77·3	77·9	78·1	80·1	79·2	81·1	80·4	84·8	82·2	87·6	84·1	88·0	85·5	87·1	85·7	84·2	84·9	82·9	83·2	78·0	81·5
8	75·9	78·7	75·1	77·3	78·1	78·1	80·2	79·3	81·9	80·4	84·7	82·3	87·7	84·1	87·8	85·5	87·2	85·7	84·2	84·9	82·7	83·2	77·9	81·4
9	75·9	78·8	75·7	77·2	78·2	78·1	80·0	79·2	82·6	80·4	84·8	82·4	88·0	84·2	87·8	85·6	87·0	85·7	84·5	84·8	82·1	83·2	77·5	81·1
10	75·8	78·8	75·8	77·2	78·5	78·2	80·2	79·3	83·0	80·5	84·5	82·2	87·8	84·3	88·2	85·7	86·4	85·9	84·8	84·8	81·9	83·2	77·2	81·1
11	75·6	78·7	75·6	77·2	78·4	78·3	80·3	79·3	83·2	80·5	85·1	82·3	88·1	84·2	88·6	85·7	86·5	85·7	84·6	84·7	81·3	83·2	77·5	81·1
12	75·5	78·7	75·7	77·2	78·6	78·5	80·1	79·4	83·8	80·6	85·1	82·4	88·0	84·3	88·8	85·7	87·0	85·7	84·1	84·8	80·8	83·3	77·2	80·9
13	75·5	78·7	75·7	77·1	78·7	78·4	80·3	79·4	84·0	80·6	85·0	82·3	88·1	84·4	88·9	85·7	87·2	85·6	83·5	84·8	80·0	83·2	77·9	80·9
14	75·2	78·2	76·0	77·1	79·0	78·4	80·2	79·6	83·8	80·8	84·7	82·5	88·1	84·7	89·0	85·8	86·9	85·6	82·8	84·8	80·2	83·1	77·9	80·7
15	75·2	78·1	76·7	77·1	78·8	78·4	81·2	79·4	83·3	81·0	84·8	82·6	88·3	84·7	89·2	85·8	86·8	85·5	83·0	84·6	80·3	83·1	77·2	81·0
16	75·4	78·2	76·8	77·1	79·0	78·6	81·2	79·8	83·3	81·1	85·0	82·6	88·1	84·9	88·6	85·8	86·7	85·7	83·1	84·1	79·9	83·0	78·0	80·8
17	75·2	78·1	76·5	77·5	79·0	78·6	81·6	79·9	83·3	81·2	85·1	82·9	87·9	85·0	88·0	85·9	86·9	85·5	83·5	84·4	79·2	82·8	79·0	80·7
18	75·0	78·1	77·0	77·2	79·1	78·6	81·9	80·0	83·2	81·2	85·0	82·7	87·6	84·9	88·2	86·0	87·0	85·5	83·3	84·1	79·1	82·7	79·4	80·5
19	75·1	78·0	77·7	77·3	79·0	78·6	82·0	80·0	83·9	81·2	85·2	82·9	87·7	85·0	88·2	86·0	86·9	85·5	83·1	84·1	79·7	82·3	79·2	80·3
20	75·2	78·1	77·9	77·3	79·1	78·5	82·6	80·1	84·0	81·2	86·4	82·8	87·8	84·9	88·1	85·9	86·2	85·6	82·9	84·0	79·9	82·3	78·8	80·4
21	75·1	78·1	77·9	77·3	79·1	78·7	82·5	80·2	83·6	81·3	86·8	83·0	88·0	85·1	87·9	85·9	86·0	85·5	83·4	84·0	80·0	82·0	78·1	80·7
22	74·8	78·0	78·0	77·4	79·2	78·7	82·1	80·2	84·1	81·6	86·9	83·0	87·7	85·1	87·1	85·8	85·9	85·6	83·8	84·0	80·2	82·1	78·0	80·4
23	75·2	78·0	78·0	77·4	79·1	78·7	81·8	80·2	83·7	81·7	87·3	83·2	87·3	85·1	87·1	85·9	85·1	85·3	83·4	83·9	80·4	82·1	78·0	80·3
24	74·9	78·0	77·7	77·9	79·4	78·9	81·9	80·1	83·7	81·8	87·2	83·3	88·0	85·0	87·1	85·9	84·9	85·2	83·3	84·0	80·5	82·1	78·1	80·3
25	74·9	78·0	77·5	77·9	80·0	79·0	82·1	80·2	84·3	81·8	87·2	83·4	88·4	85·2	87·1	85·8	84·3	85·2	83·3	84·0	80·4	82·1	78·6	81·0
26	74·8	77·9	78·3	77·9	79·7	79·0	82·2	80·3	84·3	81·8	87·0	83·4	88·0	85·2	87·1	85·8	84·2	85·1	82·8	83·9	80·5	82·1	78·2	81·0
27	74·6	77·9	79·1	78·0	78·5	79·1	82·2	80·3	84·0	81·8	87·0	83·6	87·9	85·1	87·3	85·8	84·7	85·2	82·6	83·9	79·8	82·1	78·4	81·0
28	74·7	77·8	79·3	78·1	79·1	79·0	81·2	80·4	84·0	81·9	86·9	83·7	87·4	85·1	87·8	85·8	84·6	85·1	82·1	83·5	79·0	82·1	78·0	80·4
29	74·7	77·4			79·4	79·0	80·9	80·4	83·9	82·0	87·0	83·8	87·7	85·1	87·9	85·9	84·1	85·1	82·8	83·8	79·0	82·0	77·7	80·5
30	74·7	77·5			79·5	79·1	80·5	80·6	83·7	82·0	86·8	83·8	88·0	85·2	88·2	85·9	84·6	85·1	83·1	83·6	79·9	81·9	76·9	80·1
31	74·4	77·5			79·3	79·1			83·7	82·0			88·5	85·2	87·5	85·9			83·4	83·5			76·6	80·1
Mean	*75·3*	78·3	76·4	*77·4*	78·7	78·5	80·9	79·7	82·8	81·1	85·5	82·7	87·7	84·6	*88·2*	*85·7*	86·3	85·5	83·7	84·4	81·0	82·8	78·2	80·9
											Year		82·1	81·8										

* Frozen in.

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h., G.M.T.

98 ESKDALEMUIR 1945

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	degrees Absolute											
1	62·5	72·4	74·2	80·2	70·6	78·2	79·8	78·0	80·2	81·9	82·7	71·2
2	74·7	75·2	67·7	75·0	67·6	79·0	80·1	*73·2*	74·7	71·3	78·9	78·5
3	73·8	*64·3*	*63·7*	74·0	66·6	79·9	75·8	75·0	75·9	73·0	81·3	72·5
4	68·5	72·9	75·9	73·8	68·1	74·7	85·7	82·9	71·9	78·3	75·6	65·7
5	68·7	72·9	70·8	77·5	*64·8*	75·9	86·3	75·4	83·1	74·7	77·9	71·0
6	67·9	73·6	71·1	73·5	78·2	84·2	83·8	80·0	*71·8*	72·8	72·2	64·8
7	68·8	75·2	78·0	72·0	76·9	76·4	83·9	79·8	81·8	69·2	76·0	71·1
8	71·9	73·8	75·9	68·8	80·4	81·9	76·0	82·7	77·7	78·6	79·2	74·4
9	72·0	73·1	69·7	67·6	81·9	78·0	80·1	75·5	77·0	82·7	72·1	72·0
10	69·2	71·5	72·8	70·9	80·7	80·9	82·1	74·7	74·5	88·1	77·1	65·8
11	67·8	67·1	75·1	75·2	75·0	79·9	77·2	77·2	84·9	80·1	71·2	70·4
12	71·8	73·0	68·1	78·0	76·5	79·4	76·0	82·1	87·3	72·3	65·1	68·2
13	73·2	74·4	76·4	78·2	80·2	75·2	80·8	82·0	83·8	69·7	71·9	78·1
14	63·8	75·6	77·5	75·0	77·2	81·0	85·2	79·9	79·9	*67·6*	71·8	*62·0*
15	69·6	77·0	76·1	80·9	78·4	81·1	82·3	83·6	82·1	72·9	70·7	74·1
16	76·2	68·4	76·1	76·4	80·9	77·9	84·9	82·7	83·8	77·2	*64·9*	80·9
17	71·3	75·0	74·2	79·7	81·1	*72·9*	80·4	77·3	87·0	73·2	71·3	77·9
18	73·8	78·8	78·0	78·5	70·7	83·4	79·8	85·0	78·9	70·9	76·3	76·9
19	68·5	78·0	78·7	70·9	80·9	81·1	85·2	82·4	74·1	75·7	78·3	77·8
20	*56·8*	75·7	75·5	70·6	75·0	80·0	83·1	75·2	73·4	72·1	76·9	67·1
21	65·0	71·8	75·0	72·5	78·4	84·0	84·7	77·8	72·8	83·4	76·9	69·8
22	57·6	77·1	79·4	71·0	80·4	75·9	83·5	84·7	79·6	79·1	78·1	74·6
23	69·1	70·6	71·3	70·3	76·2	85·4	85·0	75·8	78·2	75·7	75·1	75·8
24	61·6	71·8	74·0	67·2	74·1	76·0	85·1	84·7	79·5	75·7	77·7	74·9
25	60·4	76·9	77·0	71·2	79·2	74·0	73·8	82·1	72·0	79·2	71·9	75·2
26	61·7	80·7	68·8	76·9	76·5	81·1	74·8	78·0	79·3	76·5	72·7	70·9
27	62·2	81·0	65·3	71·1	76·9	78·6	76·3	77·0	78·6	75·6	65·8	74·1
28	66·5	76·0	74·0	*65·2*	73·0	79·9	*73·1*	79·2	79·6	76·4	71·9	67·6
29	62·2		77·3	71·9	69·6	77·7	81·1	84·7	72·0	82·9	72·6	69·1
30	69·1		73·6	65·7	73·2	79·4	81·2	83·0	80·2	82·5	75·8	64·1
31	73·8		77·1		75·5		78·9	78·2		82·7		65·4
Mean	*67·7*	74·1	73·8	73·3	75·6	79·1	*80·8*	79·7	78·5	76·5	74·3	71·7
						Year	75·4					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0.

The minimum "on the grass" refers to the interval from 18h. on the previous day to 7h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(^{\circ}K.) = t(^{\circ}C.) + 273{\cdot}16$.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

99 ESKDALEMUIR 1945

	JANUARY, factor 5·46				FEBRUARY, factor 5·46				MARCH, factor 5·51			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	280	480	(825)	Z-	25	115	Z-	Z±	Z-	140	315	460
2	495	145	Z-	Z-	-35	Z-	55	320	365	205	220	255
3	Z-	Z+	405	255	270	260	635	275	170	265	345	275
4	160	275	410	290	Z-	60	170	630	140	0	5	330
5	190	290	455	(565)	-225	135	Z+	Z-	325	105	180	275
6	300	255	245	155	95	190	Z-	195	105	105	190	165
7	100	225	270	220	Z-	60	Z+	Z-	165	160	200	170
8	185	195	260	145	215	300	-25	Z-	75	115	190	360
9	175	Z±	270	580	-75	125	270	Z-	275	160	135	265
10	225	295	450	Z±	160	210	Z-	250	130	100	155	230
11	105	Z±	Z-	155	210	395	395	-175	120	195	210	485
12	-	105	100	-20	95	Z-	Z-	-155	275	175	160	235
13	-105	145	180	120	65	180	140	55	460	465	325	565
14	205	285	220	400	65	-255	70	140	300	280	85	245
15	345	320	170	355	315	395	180	145	85	70	335	335
16	215	135	135	120	315	320	230	200	295	75	70	30
17	105	175	220	Z-	450	280	220	270	65	165	70	275
18	Z-	Z-	40	Z+	205	245	260	230	110	160	35	65
19	210	Z+	280	335	330	0	195	220	325	380	115	Z-
20	160	235	Z+	550	Z-	110	165	465	80	60	115	10
21	140	110	325	435	145	220	225	55	210	170	110	400
22	175	180	485	Z±	115	275	155	155	220	200	95	240
23	490	290	350	515	-	-	185	230	540	355	175	405
24	160	150	225	400	325	190	145	Z-	365	545	140	375
25	275	430	580	550	Z-	40	130	Z-	195	15	-25	215
26	310	270	305	460	Z-	25	95	110	220	385	155	240
27	255	195	305	695	115	50	265	325	90	170	320	275
28	180	85	235	300	-55	150	180	95	385	165	335	180
29	90	270	385	735					130	Z-	350	Z+
30	(-180)	115	85	110					70	95	135	Z-
31	35	210	280	Z-					Z-	55	Z-	-150
(a)	214	226	303	367	195	180	208	230	217	184	182	273
(b)	184	224	286	365	196	193	242	153	222	187	167	265
Mean	(a) 277		(b) 265		(a) 203		(b) 196		(a) 214		(b) 210	

	APRIL, factor 5·61				MAY, factor 5·56				JUNE, factor 5·48			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
					volts per metre							
1	-160	10	(-60)	-50	170	235	85	130	195	90	185	40
2	-	-	-	-	155	80	Z±	150	95	Z-	105	165
3	(20)	Z-	Z+	130	120	150	Z±	Z-	5	Z-	160	435
4	80	110	60	105	175	170	110	170	340	265	Z-	Z-
5	Z-	Z-	-30	205	220	(180)	85	-115	175	-70	115	175
6	165	-85	20	320	-70	430	105	315	-575	95	120	-
7	695	275	245	-	140	195	80	(10)	-	(15)	105	-185
8	-	-	250	435	150	(5)	280	590	95	Z-	55	130
9	750	770	225	185	375	250	110	105	115	-170	-165	-120
10	280	280	350	300	125	340	190	200	190	75	100	95
11	-	Z-	195	135	140	235	185	425	(20)	(40)	75	0
12	150	140	305	505	125	130	65	(5)	(5)	55	110	135
13	510	175	265	295	(0)	Z-	-60	Z-	45	25	30	25
14	200	210	-260	255	-135	25	Z-	135	60	20	85	105
15	375	350	280	240	105	115	95	70	130	75	40	145
16	395	230	215	215	30	Z-	Z-	120	105	105	60	120
17	370	475	230	465	Z-	90	170	240	-	35	65	-
18	60	235	205	375	220	165	155	180	-	-	75	(25)
19	120	135	300	595	20	115	200	155	35	115	160	275
20	310	415	140	275	80	60	115	Z-	(25)	105	170	35
21	385	90	175	245	365	340	95	(10)	(10)	90	85	200
22	240	85	150	180	(10)	Z-	Z-	295	-	145	130	200
23	60	70	160	255	155	645	185	145	250	125	85	195
24	75	205	190	105	95	115	215	330	410	210	155	320
25	60	(10)	105	65	85	100	120	140	115	150	100	115
26	25	5	110	120	130	140	Z+	Z-	-260	125	75	115
27	130	225	165	Z-	115	25	110	155	0	70	85	105
28	355	130	140	140	-125	35	20	330	55	65	50	90
29	90	125	175	220	190	90	Z+	395	60	240	170	Z+
30	140	235	140	130	310	190	90	160	155	160	20	200
31					350	170	185	170				
(a)	242	208	192	250	154	172	133	197	112	104	99	144
(b)	219	192	157	241	155	199	132	175	92	73	81	119
Mean	(a) 223		(b) 202		(a) 164		(b) 165		(a) 115		(b) 91	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface)
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 5·76				AUGUST, factor 5·91				SEPTEMBER, factor 5·60			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	(15)	70	160	35	485	150	190	205	-	-	140	405
2	15	130	150	160	420	335	305	650	300	295	205	445
3	-	135	170	515	180	225	245	385	(5)	105	255	425
4	215	280	255	200	165	155	50	225	560	170	140	115
5	260	320	245	570	250	115	Z-	Z-	15	25	120	120
6	285	220	115	305	115	95	145	5	10	20	-	-
7	(30)	100	130	315	-130	125	70	215	-	-	160	165
8	195	170	150	100	65	150	105	250	155	100	120	190
9	15	180	50	Z-	520	285	85	310	-	-	-	-
10	380	365	150	425	105	160	125	195	-	130	160	310
11	95	200	110	350	80	135	140	85	450	175	235	185
12	290	195	165	310	(15)	55	85	140	315	550	250	Z±
13	10	30	125	210	255	240	135	335	35	Z-	65	470
14	Z±	230	55	280	140	65	85	190	Z-	200	125	235
15	170	60	80	200	130	120	Z-	190	110	80	5	205
16	255	Z-	130	115	(10)	(0)	100	190	65	145	Z-	160
17	195	160	215	255	125	125	105	155	280	345	570	(25)
18	210	225	245	160	470	210	100	-50	(0)	(20)	165	230
19	-5	80	160	75	25	85	85	100	180	425	-215	155
20	-45	-	100	165	60	60	95	(5)	465	435	35	150
21	65	245	10	110	(0)	-	-20	65	200	170	140	235
22	170	110	35	55	(0)	30	50	55	Z-	Z-	Z±	Z+
23	30	0	100	55	-	-	-	-	5	115	115	Z-
24	90	150	200	345	-	-	-	-	95	135	205	340
25	145	90	175	510	-	-	-	-	230	220	215	340
26	200	180	120	125	-	-	160	(10)	235	420	170	205
27	180	200	-15	165	(5)	(5)	150	280	90	210	170	235
28	110	220	160	125	270	160	105	210	90	210	185	180
29	110	105	40	275	(0)	(40)	125	(25)	40	120	95	200
30	120	110	145	435	(5)	(10)	105	185	350	90	95	465
31	150	125	245	230	(15)	(5)	95	(0)				
(a)	148	162	140	239	150	121	122	179	178	196	166	248
(b)	143	159	141	235	142	121	120	181	203	197	153	234
Mean	(a) 172		(b) 169		(a) 143		(b) 141		(a) 197		(b) 197	

	OCTOBER, factor 5·41				NOVEMBER, factor 5·45				DECEMBER, factor 5·41			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	335	260	145	185	125	535	250	95	160	360	150	55
2	75	115	155	325	110	100	120	210	110	150	145	155
3	470	420	240	480	45	100	100	120	(100)	140	250	500
4	160	155	270	375	110	305	195	120	470	445	Z-	190
5	275	375	220	200	(85)	(25)	185	255	115	120	170	350
6	150	185	220	100	185	195	200	15	340	225	230	255
7	(5)	(35)	390	245	45	70	80	90	120	55	130	325
8	120	155	140	280	100	40	255	240	65	20	70	Z±
9	125	170	160	Z-	95	80	190	175	125	55	215	(745)
10	180	Z-	85	155	140	145	Z-	195	445	240	310	275
11	120	115	150	175	Z-	140	110	225	90	130	545	415
12	195	265	195	155	105	130	110	365	390	375	170	155
13	80	495	315	425	115	140	170	120	100	85	185	200
14	125	165	145	350	85	105	220	140	125	125	290	215
15	525	550	325	605	360	260	120	205	260	230	370	Z-
16	265	220	140	235	150	265	200	155	165	270	0	235
17	340	470	180	365	(60)	(10)	200	190	Z-	Z-	165	Z±
18	(15)	(75)	175	60	80	70	135	110	105	-20	140	275
19	45	100	245	285	115	110	85	120	30	255	150	625
20	195	185	225	100	75	70	155	75	265	250	Z-	545
21	260	355	195	175	180	180	185	105	665	520	500	350
22	305	(40)	Z±	385	135	205	215	375	295	-105	150	325
23	Z±	Z-	Z-	200	55	(20)	Z±	120	255	Z-	245	175
24	160	Z-	Z-	Z-	150	155	140	105	Z-	Z-	Z-	220
25	45	75	Z-	170	(15)	(120)	(10)	-	265	475	525	755
26	160	255	270	Z-	(15)	(5)	200	270	480	180	445	Z-
27	95	115	120	50	335	350	310	100	125	190	210	265
28	60	-90	Z-	55	240	150	270	260	200	175	245	525
29	100	235	135	85	265	95	205	110	115	235	370	630
30	355	325	165	340	180	665	425	355	240	150	230	175
31	85	470	320	420					110	115	205	305
(a)	181	236	205	249	129	161	180	173	218	214	243	342
(b)	191	254	209	262	136	170	189	172	197	188	240	353
Mean	(a) 218		(b) 229		(a) 161		(b) 167		(a) 254		(b) 245	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means				
(a)	178	180	181	241
(b)	173	180	176	230
	(a) 195		(b) 190	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES
The departures from the mean of the day are adjusted for non-cyclic change†

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	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	No. of days used	Mean
	volts per metre																										v./m.
	0a days only*																										
Jan.	−56	−55	*−86*	−61	−62	−72	−69	−39	−47	+3	+37	+36	+14	+23	+18	+24	+30	+42	*+97*	+84	+59	+48	+38	+2	+75	7	308
Feb.	−18	+31	+49	−1	+54	+42	+43	*+97*	+88	+54	+29	−3	−11	−10	−35	−78	−79	−78	−74	*−97*	−86	+36	+54	−5	+80	2	245
Mar.	+14	+22	+39	+29	−7	−3	0	+27	+8	−47	−58	−53	−49	−52	*−66*	−63	−28	−4	+62	+66	*+69*	+27	+43	+32	+8	14	239
Apr.	−9	+23	+38	+37	+6	+6	+19	−3	0	−15	*−59*	−53	−33	−34	−30	+5	−18	−9	+14	+33	+37	+3	*+40*	+4	−61	11	248
May	−37	−30	*−51*	−34	+5	−19	−39	−26	*+81*	+36	+3	−30	−16	−20	−8	+22	+33	+20	+29	+54	+43	+21	−2	−25	−5	7	182
June	−12	*−38*	−22	−34	−25	−31	−14	−13	−3	+21	+3	+3	+16	+6	−2	+9	+2	+7	+13	+19	+51	*+52*	−8	−5	−7	4	79
July	+20	−6	−22	−30	−19	+2	+4	+7	−17	−12	−7	−20	−30	−46	−41	−35	*−49*	−41	−21	+15	+104	*+120*	+86	+36	+17	14	212
Aug.	+5	+58	+32	+15	+31	+22	+52	+14	−17	−45	−48	−47	−44	−56	*−59*	−52	−48	−42	−32	+31	*+67*	+51	+56	+47	+4	9	218
Sept.	−1	+4	−3	+2	+10	+9	+52	+94	−13	−20	−17	−33	−73	*−88*	−66	−57	−48	−25	+43	*+99*	+94	+38	+2	−3	−14	6	218
Oct.	+23	−15	−43	−28	−16	+16	+30	+35	+12	+12	−49	*−77*	−69	−69	−53	−47	−11	+34	+72	*+84*	+51	+28	+46	+47	−34	15	263
Nov.	−45	−52	*−57*	−40	−17	−37	−21	+19	+24	+4	−5	−12	−26	+12	+6	+39	+45	+69	*+110*	+56	0	+11	−22	−52	−8	10	213
Dec.	−24	−24	−25	−57	−58	*−61*	−29	−39	−58	−58	−43	−43	−18	+17	+18	+39	+48	+30	*+83*	+64	+74	+75	+61	+18	−41	10	247
Year	−12	−7	−13	−17	−8	−11	+2	+14	+5	−6	−18	−28	*−28*	−26	−27	−16	−10	0	+33	+42	*+47*	+43	+33	+8	–	–	223
Winter	−36	−25	−30	*−40*	−21	−32	−19	+9	+2	+1	+5	−5	−10	+11	+2	+6	+11	+16	*+54*	+27	+12	+43	+33	−9	–	–	253
Equinox	+7	+9	+8	+10	−2	+7	+25	+38	+2	−17	−46	−54	−56	*−61*	−54	−41	−26	−1	+48	*+71*	+63	+24	+33	+20	–	–	242
Summer	−6	−4	−16	−21	−2	−7	+1	−5	+11	0	−12	−23	−19	*−29*	−27	−14	−15	−14	−3	+30	*+66*	+61	+33	+13	–	–	173
	1a and 2a days only*																										
Jan.	−31	−61	−30	−13	−67	−65	*−89*	−66	−43	−21	+19	+59	+56	+35	−2	+54	*+65*	+56	+43	−21	+38	+20	+47	+22	−130	5	223
Feb.	+7	−33	−88	−80	−46	−121	*−157*	−101	−130	−40	+13	0	+24	+35	+77	+69	+55	+46	+49	+105	*+108*	+71	+87	+57	−68	3	102
Mar.	0	−77	−75	−55	−25	−60	+4	−23	−67	*−114*	−106	−98	−52	−21	+48	+54	+88	+83	+77	+107	+106	*+131*	+86	−8	−191	4	217
Apr.	+71	+60	+70	+52	+10	−82	−28	−38	−94	−93	*−175*	−85	−34	−3	−40	−35	−30	+19	+35	+75	+60	+105	+44	*+127*	+285	3	155
May	+53	*+72*	−25	−29	−49	*−67*	+37	+67	0	−24	−23	+23	−4	−1	−29	+11	−1	+8	+35	−27	−24	−11	−1	+5	−135	5	137
June	−15	+24	−4	+49	*+76*	+59	+55	+14	+10	+23	*−45*	−25	−7	−27	−25	−35	−42	−23	−28	−34	−13	+25	+16	−22	+135	7	87
July	−3	−13	−6	−12	−9	−13	+34	−11	−18	+9	−7	−18	−20	−9	−13	+31	0	+23	+14	+34	*+43*	*−35*	−1	+6	−28	6	108
Aug.	+7	−2	+26	+9	−24	+27	+17	−16	−16	−11	−26	−18	−15	−30	−23	+16	−44	*−54*	+1	−24	+24	*+73*	+53	+40	−110	6	128
Sept.	−11	*−49*	+12	+12	+51	+35	*+73*	+71	+51	−1	−27	−13	−22	−11	+6	−5	−5	−32	−2	0	−4	−47	−44	−33	−122	5	166
Oct.	−39	−50	+19	+9	+6	+69	+99	*+141*	+85	+85	+139	+91	+49	+10	−18	−56	−65	−92	*−189*	−153	−82	−28	−6	−29	+68	3	161
Nov.	−40	−12	−16	−28	−29	*−47*	−25	+3	+22	*+42*	+15	+4	+34	+34	+34	+18	+10	+17	+4	−3	−5	+7	−14	−36	−42	10	127
Dec.	−41	−42	−73	−72	−83	−4	*+132*	+111	+97	+109	+85	−3	+5	−71	−21	*−104*	+103	−67	−12	+31	+9	−23	−25	−49	+146	2	343
Year	−3	−15	−16	−13	−16	*−22*	+13	+13	−9	−3	−11	−7	+1	−5	−1	+1	+11	−1	+2	+7	+22	*+24*	+20	+7	–	–	163
Winter	−26	−37	−52	−48	−56	*−59*	−35	−13	−13	+23	+33	+15	+30	+8	+22	+9	*+58*	+13	+21	+28	+37	+19	+24	−1	–	–	199
Equinox	+5	−29	+7	+5	+11	−9	+37	+38	−6	−31	*−42*	−26	−15	−6	−1	−11	−3	−5	−20	+7	+20	*+40*	+20	+14	–	–	175
Summer	+11	+20	−2	+4	−1	+1	*+36*	+13	−6	−1	*−25*	−9	−11	−17	−23	+6	−22	−11	+5	−13	+7	+13	+17	+7	–	–	115

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August.

* For explanation of 0a, 1a, 2a days see p.90, *Observatories' Year Book, 1938.*

† See p.10, *Observatories' Year Book, 1938.*

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	1·3	2c	4·8	1b	2·7	(2c)	(16·7)	0a	···	2b	4·4
2	2c	8·1	2c	6·3	0a	···	(2b)	-	1c	2·0	2b	4·3
3	2c	6·2	1b	2·7	1a	0·3	2c	3·3	2c	4·8	2b	3·7
4	0a	···	2b	5·3	(1a)	-	2b	3·1	1b	1·9	2c	6·1
5	1b	1·1	2c	3·9	0a	···	2c	8·8	1b	2·5	1a	3·1
6	1a	0·5	2b	4·1	1a	0·1	2a	5·2	1b	2·8	2b	3·7
7	0a	···	2c	6·9	0a	···	(0a)	···	1a	0·2	2a	4·3
8	1a	0·1	2c	6·1	0a	···	(0a)	···	1b	3·1	2b	4·0
9	1b	2·1	2c	8·4	0a	···	0a	···	1b	1·7	2c	9·4
10	1b	1·2	1b	1·0	0a	···	(0a)	···	0a	···	(1a)	0·5
11	1b	1·0	2b	3·2	0a	···	(2b)	5·7	0a	···	(1a)	2·3
12	(1a)	0·4	2b	10·9	0a	···	1a	0·1	1a	0·1	1b	1·1
13	1b	1·8	1b	2·0	0a	···	0a	···	2c	8·3	0a	···
14	0a	···	2a	5·2	0a	···	2b	3·7	1c	7·0	1a	1·5
15	1a	0·4	0a	···	1b	0·3	0a	···	2b	3·5	1a	1·1
16	1a	1·1	1b	1·9	1b	2·7	0a	···	2c	11·3	0a	···
17	2c	6·6	1b	1·5	1b	1·9	0a	···	2c	7·4	0a	···
18	2c	10·9	0a	···	2b	4·3	0a	···	0a	···	(1a)	(0·4)
19	0b	···	1b	2·4	2c	8·4	0a	···	0a	···	(0a)	···
20	0b	···	1b	2·7	1b	1·4	1b	0·3	2c	6·5	1b	1·4
21	0a	···	1b	1·2	1a	0·5	0a	···	(1a)	0·1	1a	0·3
22	1b	1·2	1b	2·9	0a	···	0a	···	2c	12·6	1b	1·1
23	0b	···	(1a)	-	0a	···	0a	···	0a	···	1a	0·8
24	0a	···	2b	3·8	0a	···	0a	···	0a	···	1b	0·5
25	0a	···	2c	13·9	2b	6·0	0a	···	1a	0·9	2b	7·5
26	0a	···	2b	6·9	0a	···	1a	1·3	2c	7·4	1a	2·1
27	1b	0·9	1a	0·3	1b	2·8	1b	0·8	1a	1·1	1a	1·5
28	1a	0·3	1a	1·7	1a	0·1	1b	0·2	2b	7·4	0a	···
29	2b	2·0			2c	5·9	1b	2·2	1c	2·7	1c	1·5
30	(2a)	4·0			2b	5·6	0a	···	1b	1·2	2b	4·9
31	2c	8·0			2c	14·4			1b	1·7		
Total	-	59·2	-	110·0	-	57·4	-	51·4	-	98·2	-	71·5
No. of days used	-	31	-	27	-	30	-	29	-	31	-	30
Mean	-	1·9	-	4·1	-	1·9	-	1·8	-	3·2	-	2·4

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient	Character	Duration of negative potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1b	1·5	0a	···	1a	0·3	0a	···	0a	···	1a	0·5
2	1a	0·1	0a	···	0a	···	0a	···	1a	0·6	1b	2·9
3	(0a)	···	0a	···	0a	···	0a	···	1a	0·6	1b	1·7
4	0a	···	1a	0·1	1a	0·2	0a	···	1a	0·5	1b	2·8
5	0a	···	1c	2·9	1a	0·5	0a	···	(0a)	···	0a	···
6	0a	···	2a	4·0	(0a)	···	0a	···	1a	0·1	0a	···
7	0a	···	1b	2·3	(0a)	···	(0a)	···	1a	1·4	0a	···
8	1a	0·7	0a	···	0a	···	0a	···	0a	···	1b	1·8
9	2b	3·6	0a	···	(0a)	···	1b	0·8	0a	···	0b	···
10	0a	···	0a	···	(1a)	0·1	2b	3·5	1b	0·3	0b	···
11	0a	···	0a	···	1b	1·8	0a	···	1b	1·2	0a	···
12	0a	···	0a	···	1b	1·0	0a	···	0a	···	0a	···
13	1b	2·1	0a	···	2c	5·2	0a	···	1b	1·7	0a	···
14	1b	2·5	1a	0·1	1b	2·0	0a	···	0a	···	1b	1·0
15	1a	0·5	2b	4·9	1b	0·9	0a	···	0a	···	1b	0·8
16	1b	2·2	(1a)	0·1	2c	7·9	0a	···	0a	···	1b	1·7
17	0a	···	0a	···	1a	0·2	0a	···	(0a)	···	2c	8·7
18	1b	0·4	2a	4·0	(0a)	···	1b	0·1	1a	0·1	2b	3·2
19	2c	4·7	1a	0·7	1a	2·3	0a	···	1a	0·1	2b	3·5
20	2b	3·6	0a	···	1c	2·2	1b	0·8	1a	0·2	1b	2·0
21	2b	6·3	(1a)	1·5	1b	0·8	1a	1·6	1a	0·3	0a	···
22	1a	1·1	(1a)	1·7	2c	11·2	2c	6·9	2b	3·9	1b	2·7
23	1a	1·8	(2c)	-	2c	6·0	2c	7·2	1b	2·3	2c	4·9
24	0a	···	(2c)	-	1b	1·5	2c	12·2	0a	···	2c	10·4
25	0a	···	(1b)	-	0a	···	2c	4·9	(1a)	0·5	1a	0·1
26	0a	···	(0a)	···	0a	···	2c	4·1	(1b)	1·3	1b	2·9
27	1b	1·5	0a	···	1b	0·2	1a	0·2	1a	0·3	1b	1·2
28	0a	···	1a	1·7	1a	0·1	2b	7·7	0a	···	0a	···
29	1a	0·6	(0a)	···	0a	···	1a	1·2	1b	0·5	1b	0·3
30	0a	···	(1a)	0·5	0a	···	0a	···	0a	···	0a	···
31	0a	···	(0a)	···			1b	1·1			0a	···
Total	-	33·2	-	24·5	-	44·4	-	52·3	-	15·9	-	53·1
No. of days used	-	31	-	28	-	30	-	31	-	30	-	31
Mean	-	1·1	-	0·9	-	1·5	-	1·7	-	0·5	-	1·7

Annual values: Character 0 1 2
No. of days used 136 149 80

Duration: Total 671·1
No. of days 359
Mean 1·87 hr.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

102 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	503	512	515	512	517	512	525	529	530	529	512	515	530	530	515	503	520	520	496	499	534	509	508	503	516
2	507	514	506	521	527	529	529	529	522	518	516	517	513	513	509	502	507	513	518	514	511	517	518	514	516
3	517	514	518	525	523	524	524	521	526	523	504	517	519	525	517	515	520	519	510	517	517	522	522	521	519
4	521	522	523	524	527	529	528	526	525	529	529	527	530	529	526	523	518	505	494	474	477	513	505	501	517
5	512	510	506	509	514	517	521	521	522	514	519	518	517	516	512	513	518	520	521	518	522	524	522	522	517
6	518	518	520	521	526	532	532	534	533	529	516	518	521	519	517	520	521	524	525	526	529	522	526	527	524
7	518	518	518	518	529	529	533	535	530	527	525	520	525	528	529	527	527	528	525	527	522	520	528	518	525
8	514	518	520	521	526	532	532	527	523	525	522	523	525	529	521	522	521	523	519	520	521	523	524	524	523
9	525	522	522	522	523	525	526	521	519	527	529	529	533	533	533	528	529	531	536	531	529	518	497	468	523
10 d	477	498	518	521	513	518	502	505	497	494	492	497	480	496	497	507	505	510	510	513	512	517	517	517	505
11 q	517	521	518	518	520	520	521	520	516	514	512	509	513	517	517	515	515	518	517	518	517	514	517	520	517
12	516	518	522	526	528	529	528	529	527	522	521	521	521	525	516	514	511	518	518	514	513	512	521	524	521
13	522	530	517	518	533	541	538	530	525	521	516	516	511	514	518	523	527	529	529	529	529	529	529	529	525
14	527	528	529	529	532	532	533	533	529	525	521	517	522	529	531	532	532	532	533	532	529	531	532	533	*529*
15 d	532	530	531	534	529	540	545	517	501	529	490	486	482	513	494	485	486	489	470	474	489	509	502	498	506
16	501	516	502	504	502	508	504	509	511	502	497	508	508	512	512	515	516	517	517	515	509	504	500	497	508
17 d	493	495	497	502	513	514	517	517	520	514	490	504	513	516	510	516	516	520	517	504	512	512	516	517	510
18	517	516	513	515	517	520	522	523	524	520	516	514	513	518	525	525	528	528	524	516	520	528	512	508	519
19	510	518	516	524	529	520	522	522	524	530	530	521	516	521	525	520	516	512	513	505	509	520	520	516	519
20	523	519	516	518	520	540	539	535	524	515	504	501	504	516	518	520	516	524	521	522	524	521	520	516	520
21	524	524	519	517	517	524	524	524	521	520	515	517	519	517	517	512	515	517	520	517	520	520	532	516	519
22	517	521	520	520	520	522	524	524	522	519	517	515	516	524	528	527	527	524	524	526	525	528	516	520	522
23 q	516	516	517	523	524	526	524	524	520	522	526	524	524	524	524	524	525	527	526	524	520	519	523	521	523
24 q	523	520	520	521	522	524	524	524	522	520	523	523	525	528	530	531	531	530	528	528	526	525	525	525	
25 q	525	524	524	524	524	524	522	520	517	512	509	511	517	524	529	529	528	530	531	532	532	531	529	528	524
26	524	528	528	531	533	532	531	531	531	532	536	542	546	543	541	535	535	521	508	496	495	511	516	519	527
27	520	517	528	529	531	528	528	527	522	519	515	517	524	523	531	530	528	530	531	532	529	532	532	532	526
28 d	530	530	530	532	535	537	536	534	525	521	524	526	529	532	532	534	533	524	544	528	506	513	523	497	527
29 d	497	486	443	480	486	496	492	490	491	496	487	490	498	509	504	512	501	454	489	488	469	470	484	492	*488*
30	519	501	503	508	512	509	520	518	512	501	496	494	486	492	500	508	492	509	516	516	514	512	515	516	507
31 q	514	512	513	515	516	520	521	522	517	510	508	504	504	511	515	518	522	522	524	522	521	514	508	520	516
Mean	515	517	515	519	521	524	*525*	523	520	519	*513*	514	516	520	519	519	519	518	518	515	516	517	517	515	518

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

103 ESKDALEMUIR (D) — 12° + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	14·4	16·5	17·4	17·4	18·0	19·3	18·7	18·7	18·4	19·0	19·8	20·4	20·9	20·8	20·3	19·4	19·4	20·3	17·4	16·4	10·6	15·5	15·0	15·0	17·9
2	20·2	15·3	14·0	17·4	17·2	18·8	19·1	20·9	19·1	19·7	19·9	20·0	20·9	20·7	19·4	17·1	16·6	18·8	18·7	16·9	16·9	16·0	16·9	17·7	18·3
3	18·1	18·4	18·9	18·7	17·9	18·1	18·0	17·8	18·4	19·9	21·2	21·9	21·4	20·7	20·2	17·5	17·9	19·6	15·1	13·2	17·3	18·5	17·9	17·8	18·5
4	17·8	17·9	18·0	18·3	18·3	18·3	17·9	17·8	18·1	19·6	20·0	20·2	20·2	19·6	18·2	18·6	19·6	17·5	20·1	14·7	14·2	9·7	15·5	16·7	17·8
5	17·4	15·1	16·0	16·8	15·6	16·0	17·5	18·3	18·8	19·0	19·4	20·3	21·4	20·7	19·0	19·2	18·9	19·1	19·5	17·3	17·8	18·1	17·9	17·9	18·2
6	17·8	18·7	18·5	16·7	16·8	17·1	17·9	18·2	18·7	19·9	20·7	21·7	22·7	21·1	20·1	19·6	19·1	18·9	18·7	18·6	18·4	17·9	16·5	16·0	18·8
7	17·9	17·8	18·0	19·4	18·8	18·6	18·5	18·6	18·3	18·7	19·1	19·4	20·1	19·8	19·1	18·8	18·9	19·3	19·0	19·0	18·8	13·9	13·4	15·9	18·3
8	17·0	18·6	18·7	18·3	18·7	18·7	18·4	17·8	17·6	18·5	19·7	21·2	21·6	21·1	19·9	19·7	20·5	20·9	20·6	19·3	18·6	18·3	18·6	18·3	*19·2*
9	18·3	17·8	17·5	17·8	17·9	18·2	17·9	18·3	18·1	19·7	20·7	20·7	21·5	20·5	20·5	21·9	21·5	20·0	19·6	18·9	18·9	17·6	1·1	5·0	17·9
10 d	13·2	13·4	10·6	14·1	18·4	19·5	28·8	27·7	22·1	20·1	19·2	21·5	21·4	19·8	19·6	18·9	16·7	16·0	12·9	16·7	17·6	17·6	17·8	17·9	18·4
11 q	18·3	18·7	17·8	17·8	17·8	17·8	17·6	17·4	17·1	17·4	17·9	18·9	20·5	20·2	18·9	18·7	18·9	18·7	17·9	17·3	17·2	17·5	17·5	17·2	18·1
12	18·0	18·7	18·6	18·6	18·5	18·5	18·4	18·3	17·7	17·8	18·4	19·1	20·2	20·2	19·6	20·6	20·8	19·5	19·1	17·7	11·9	15·1	16·8	16·2	18·3
13	18·7	14·0	16·9	20·5	21·6	18·7	19·8	20·1	19·6	18·3	18·2	19·3	19·6	20·2	19·8	19·4	19·1	18·8	18·8	18·7	18·0	17·8	17·9	17·9	18·8
14	17·9	18·2	18·3	18·5	18·6	18·3	17·8	17·3	16·5	16·5	17·3	18·7	20·2	20·4	19·4	18·8	18·9	18·9	18·8	18·7	18·2	17·8	17·7	17·8	18·3
15 d	17·7	17·7	18·4	17·0	16·0	18·6	15·7	18·9	19·6	22·4	22·3	22·5	24·1	24·0	24·0	23·9	16·9	6·1	11·7	16·5	16·6	11·3	15·5	14·9	18·0
16	15·3	21·8	17·5	15·1	16·9	18·0	18·4	18·4	17·8	17·7	17·9	18·4	20·5	20·7	20·2	19·2	19·1	19·2	19·0	18·6	16·5	11·4	15·2	8·8	17·6
17 d	9·7	14·4	14·7	15·8	15·9	17·3	17·2	17·8	17·7	17·4	18·3	20·2	21·6	21·8	20·5	21·4	21·3	18·6	20·5	11·3	17·0	17·3	17·3	17·0	17·6
18	17·2	18·1	17·6	17·7	17·7	17·9	17·8	17·7	17·5	17·7	18·3	19·4	21·2	21·3	21·3	21·4	21·6	22·4	22·9	22·4	19·0	17·9	11·3	13·1	18·8
19	14·8	16·8	15·2	16·5	15·4	17·6	18·1	18·0	17·8	18·0	17·9	19·4	19·6	20·7	20·7	21·1	20·1	21·3	21·9	13·7	18·2	17·2	17·5	17·2	18·1
20	17·7	16·0	16·6	16·1	16·9	16·7	21·3	21·0	20·4	20·0	19·4	19·4	20·9	20·5	20·1	19·4	18·1	18·7	18·7	18·2	17·3	16·3	15·6	16·5	18·4
21	17·1	17·7	17·3	17·2	17·5	17·2	16·5	16·8	16·8	17·6	18·1	20·5	21·7	20·9	20·8	20·0	20·0	19·6	19·6	20·1	19·2	18·9	16·7	17·4	18·5
22	17·2	16·2	16·2	16·5	17·3	17·6	17·9	17·5	17·6	18·4	19·1	19·9	21·3	20·7	19·6	19·2	19·1	19·6	18·8	18·8	18·6	16·6	16·0	17·1	18·2
23 q	16·9	16·9	17·1	17·0	17·8	16·5	16·9	17·0	17·1	17·8	19·5	20·5	21·2	20·7	19·6	19·3	19·3	19·0	18·7	18·7	18·3	17·6	17·7	17·4	17·6	18·2
24 q	18·0	17·7	17·7	17·1	17·7	17·6	17·5	17·3	17·0	17·7	18·6	19·1	20·1	20·7	19·7	18·6	18·6	18·7	18·7	18·0	17·9	17·8	17·8	17·9	18·2
25 q	17·5	17·1	16·9	17·0	17·1	17·1	17·1	16·9	16·8	17·6	19·2	20·4	21·9	21·0	19·8	18·7	18·6	18·9	18·9	17·9	17·8	17·8	17·8	18·0	18·2
26	17·9	17·9	17·8	18·1	18·0	17·6	17·7	17·1	16·8	17·6	18·8	20·5	23·2	22·3	21·5	20·2	18·9	19·6	19·1	16·0	14·0	15·7	16·6	18·7	18·4
27	18·0	18·4	21·3	17·8	17·4	18·4	17·6	17·3	17·2	17·8	18·9	21·0	21·8	21·7	20·7	19·9	19·2	19·2	19·3	18·9	18·0	17·8	17·8	18·0	18·9
28 d	18·0	17·5	18·0	18·4	18·3	18·2	18·0	17·8	17·7	18·4	19·2	20·3	21·4	21·4	20·8	19·7	19·8	18·4	21·1	21·4	15·4	13·3	17·6	12·4	18·4
29 d	−2·9	−2·9	1·6	2·9	0·7	10·6	14·2	19·2	19·6	20·9	21·3	21·5	21·7	23·2	23·4	18·7	20·9	9·7	18·4	7·0	8·8	9·5	13·9	13·3	*13·1*
30	14·4	17·3	18·3	17·8	23·9	19·4	18·5	21·9	19·9	20·5	18·5	19·8	21·4	21·6	22·3	20·5	18·6	17·6	18·3	17·1	16·3	15·5	15·3	15·7	18·8
31 q	17·0	17·3	18·2	18·8	17·4	16·9	16·9	16·9	16·8	17·3	18·7	19·6	21·0	21·8	20·7	19·0	18·5	18·8	18·6	18·1	17·7	14·9	14·5	17·6	18·0
Mean	16·3	16·6	16·8	17·0	17·3	17·7	18·2	18·5	18·1	18·7	19·2	20·2	*21·2*	21·0	20·3	19·6	19·2	18·4	18·7	17·3	16·8	16·1	*15·9*	16·1	18·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

104 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JANUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1106	1106	1106	1104	1102	1102	1107	1106	1106	1105	1105	1106	1105	1108	1115	1118	1117	1116	1120	1120	1110	1103	1105	1105	1108
2	1089	1087	1096	1099	1100	1100	1102	1102	1104	1104	1101	1101	1105	1110	1117	1122	1123	1118	1117	1116	1116	1114	1112	1111	1107
3	1108	1108	1107	1106	1105	1105	1105	1104	1101	1102	1105	1104	1105	1108	1111	1113	1113	1112	1117	1116	1111	1111	1110	1109	1108
4	1108	1108	1108	1107	1107	1107	1106	1106	1105	1101	1100	1100	1101	1105	1106	1107	1110	1117	1128	1143	1137	1113	1108	1112	1110
5	1108	1112	1113	1113	1113	1111	1111	1111	1108	1111	1111	1111	1110	1113	1114	1114	1114	1113	1113	1113	1112	1111	1111	1110	1112
6	1111	1110	1104	1105	1105	1104	1105	1103	1103	1103	1105	1108	1107	1109	1111	1108	1108	1108	1109	1109	1108	1110	1111	1105	1107
7	1105	1105	1106	1106	1105	1105	1105	1102	1102	1105	1101	1101	1100	1101	1105	1106	1105	1106	1107	1106	1107	1112	1106	1100	1105
8	1101	1100	1100	1100	1100	1100	1101	1104	1106	1105	1106	1106	1107	1110	1111	1110	1110	1109	1111	1112	1112	1111	1111	1109	1106
9	1107	1106	1105	1105	1104	1103	1104	1105	1105	1104	1101	1100	1100	1101	1102	1105	1104	1105	1105	1105	1105	1108	1112	1100	1104
10 d	1070	1063	1060	1077	1083	1093	1093	1088	1099	1110	1117	1117	1121	1127	1125	1124	1123	1120	1119	1116	1112	1111	1111	1111	1104
11 q	1111	1109	1110	1110	1108	1107	1107	1106	1107	1110	1108	1107	1105	1107	1110	1108	1108	1108	1109	1109	1108	1110	1109	1107	1108
12	1107	1107	1106	1106	1105	1105	1105	1105	1106	1107	1102	1102	1105	1108	1112	1112	1111	1111	1111	1111	1116	1111	1109	1106	1108
13	1099	1092	1097	1092	1088	1093	1094	1097	1099	1102	1102	1101	1101	1105	1107	1107	1106	1105	1104	1104	1104	1105	1106	1106	1101
14	1106	1106	1106	1105	1103	1102	1101	1101	1101	1100	1097	1098	1099	1100	1102	1103	1102	1102	1102	1101	1102	1102	1101	1102	1102
15 d	1101	1102	1102	1101	1101	1093	1090	1094	1099	1100	1102	1106	1111	1113	1129	1157	1231	1178	1213	1173	1109	1123	1116	1117	*1123*
16	1112	1089	1095	1100	1101	1105	1100	1099	1101	1107	1111	1111	1111	1111	1114	1116	1116	1114	1113	1113	1114	1117	1094	1095	1107
17 d	1087	1087	1087	1082	1094	1101	1105	1105	1103	1103	1107	1108	1107	1110	1117	1116	1117	1117	1116	1123	1119	1116	1113	1113	1106
18	1112	1112	1112	1112	1111	1108	1107	1106	1105	1106	1105	1101	1104	1108	1111	1112	1111	1111	1113	1119	1123	1117	1119	1119	1111
19	1117	1112	1111	1102	1099	1104	1106	1106	1105	1105	1101	1101	1103	1107	1111	1113	1119	1118	1119	1128	1125	1120	1119	1118	1111
20	1113	1112	1111	1111	1109	1102	1095	1095	1096	1105	1107	1108	1111	1114	1116	1116	1117	1114	1114	1113	1112	1112	1111	1111	1109
21	1106	1102	1104	1106	1106	1102	1104	1105	1105	1107	1109	1106	1105	1107	1111	1112	1112	1112	1113	1116	1117	1119	1115	1113	1109
22	1112	1108	1108	1107	1106	1105	1105	1105	1106	1106	1105	1105	1108	1109	1108	1107	1108	1110	1111	1111	1111	1111	1111	1111	1108
23 q	1110	1109	1108	1106	1104	1102	1104	1104	1105	1105	1102	1103	1105	1106	1106	1106	1106	1107	1107	1110	1111	1114	1113	1111	1107
24 q	1110	1110	1108	1107	1106	1106	1106	1105	1105	1108	1107	1107	1107	1109	1111	1107	1105	1105	1106	1106	1106	1107	1107	1107	1107
25 q	1107	1107	1107	1106	1106	1106	1106	1106	1106	1108	1107	1107	1107	1109	1110	1107	1106	1106	1106	1106	1106	1106	1106	1106	1107
26	1107	1106	1105	1104	1101	1101	1100	1100	1101	1100	1099	1096	1095	1095	1101	1101	1102	1106	1117	1133	1137	1124	1115	1111	1107
27	1108	1107	1101	1100	1100	1100	1101	1102	1105	1108	1108	1106	1105	1106	1110	1108	1107	1106	1106	1106	1107	1106	1106	1105	1105
28 d	1105	1104	1102	1100	1100	1100	1100	1100	1100	1101	1100	1100	1100	1102	1105	1102	1101	1106	1102	1106	1124	1125	1112	1093	1104
29 d	1057	1058	1058	1021	972	1057	1091	1087	1084	1096	1104	1106	1110	1112	1124	1128	1135	1168	1155	1150	1129	1131	1122	1108	*1098*
30	1083	1093	1104	1107	1099	1073	1087	1093	1095	1101	1105	1107	1113	1119	1117	1119	1128	1126	1119	1116	1113	1113	1112	1110	1106
31 q	1109	1111	1111	1110	1111	1109	1109	1108	1107	1107	1107	1110	1111	1111	1111	1111	1110	1110	1109	1108	1107	1113	1114	1111	1110
Mean	1103	1101	1102	1101	*1099*	1100	1102	1102	1103	1105	1105	1105	1106	1108	1112	1113	1116	1115	1117	*1117*	1114	1113	1111	1108	1107

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

105 ESKDALEMUIR — JANUARY 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices *K*	Sum of *K* indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	h. m.	γ	γ	h. m.	′	h. m.	′	′	h. m.	γ	h. m.	γ	γ				
1	20 12	*601*	11 2	493	108	12 30	21·6	3·1	20 9	18·5	18 50	1125	24 0	1095	30	2,2,2,2,4,2,4,3	21	1	82·6
2	6 10	536	15 46	493	43	0 8	22·4	9·9	2 4	12·5	16 10	1129	1 34	1086	43	3,2,2,1,2,2,1,2	15	0	82·6
3	19 12	540	10 40	499	41	11 45	23·1	11·4	19 5	11·7	19 3	1122	9 0	1100	22	1,1,2,2,2,2,4,0	14	1	82·6
4	12 52	540	19 49	458	82	18 54	21·9	4·3	21 17	17·6	19 48	1152	10 25	1099	53	0,0,0,1,2,3,4,4	14	1	82·6
5	7 38	525	2 22	502	23	12 58	21·9	14·3	1 0	7·6	19 49	1116	0 42	1107	9	2,1,1,1,1,1,2,0	9	0	82·6
6	22 53	540	11 16	510	30	1 56	25·0	15·2	22 59	9·8	13 57	1112	2 19	1099	13	3,1,2,1,1,0,1,2	11	0	82·6
7	12 24	537	2 56	510	27	12 25	21·8	11·4	22 17	10·4	21 26	1113	12 25	1099	14	1,2,0,2,2,1,1,2	11	0	82·6
8	5 37	533	0 7	512	21	12 55	22·3	16·0	0 3	6·3	19 6	1114	5 50	1099	15	1,1,0,0,2,1,2,0	7	0	82·5
9	16 18	545	24 0	442	103	15 49	23·3	−9·3	22 34	32·6	22 51	1119	24 0	1099	20	0,0,1,2,1,2,1,5	12	1	82·4
10 d	2 4	564	0 1	442	122	6 50	*34·1*	7·8	2 12	26·3	13 28	1129	2 11	1048	81	5,3,3,2,3,2,3,0	21	1	82·4
11 q	23 20	525	11 25	509	16	12 47	20·6	15·3	18 58	5·3	0 30	1112	12 10	1105	7	1,0,0,0,1,0,1,1	4	0	82·4
12	23 32	533	19 54	501	32	16 29	21·7	9·9	20 2	11·8	20 13	1118	11 20	1102	16	1,0,1,0,2,1,3,2	10	0	82·2
13	5 44	545	3 54	500	45	4 6	24·3	12·2	1 25	12·1	14 40	1109	4 50	1086	23	3,3,1,1,0,0,0,0	8	1	82·1
14	13 44	540	11 42	516	24	12 48	21·4	16·0	8 48	5·4	1 22	1107	11 5	1095	12	1,0,0,1,1,1,0,1	5	0	82·1
15 d	16 46	571	18 47	396	175	12 23	27·3	−6·5	16 52	33·8	16 50	*1342*	5 49	1087	*255*	1,3,3,3,4,6,5,3	28	2	82·1
16	1 5	555	23 45	478	77	1 7	25·0	6·0	23 13	19·0	21 50	1118	22 39	1087	31	4,2,2,2,1,1,3,4	19	1	82·0
17 d	18 20	530	10 48	473	57	16 11	22·7	2·5	19 45	20·2	19 40	1130	3 20	1080	50	3,2,2,3,2,2,4,2	20	1	82·0
18	2 15	551	21 50	497	54	19 12	23·8	10·1	22 18	13·7	20 20	1124	11 20	1101	23	1,0,1,0,1,2,2,3	10	0	82·0
19	4 12	539	19 32	489	50	13 18	22·2	8·8	19 36	13·4	19 34	1131	4 20	1096	35	2,2,2,1,1,2,4,2	16	1	82·0
20	5 43	548	12 40	493	55	12 12	23·9	15·2	22 34	8·7	16 49	1119	6 48	1093	26	2,3,1,2,2,2,1,1	14	1	82·1
21	22 32	559	15 59	509	50	12 31	22·5	14·1	22 20	8·4	22 12	1123	1 45	1100	23	1,1,1,1,1,1,1,3	10	0	82·1
22	21 38	533	22 30	512	21	12 35	21·9	14·4	1 48	7·5	0 1	1113	6 31	1104	9	2,1,1,1,1,1,1,2	10	0	82·1
23 q	18 52	529	21 7	509	20	12 45	21·5	15·9	5 31	5·6	21 10	1116	5 13	1101	15	1,1,0,1,1,0,1,2	7	0	82·1
24 q	14 53	533	1 16	519	*14*	13 29	20·9	16·9	8 15	*4·0*	0 1	1111	16 20	1104	7	0,0,0,1,0,0,0,0	1	0	82·1
25 q	19 50	533	11 0	508	25	12 21	22·3	16·7	8 30	5·6	14 10	1112	23 50	1105	7	0,0,0,1,1,1,0,0	3	0	82·1
26	16 39	552	20 9	484	68	12 22	24·0	13·1	20 48	10·9	20 14	1143	13 0	1094	49	1,0,1,2,2,3,3,2	14	1	82·1
27	18 50	542	11 30	509	33	2 18	23·2	14·9	7 19	8·3	14 27	1111	3 0	1099	12	2,1,1,1,1,1,1,1	9	0	82·1
28 d	18 30	556	23 52	449	107	19 43	23·2	1·6	24 0	21·6	21 0	1137	23 55	1073	64	2,1,0,1,1,2,4,5	16	1	82·1
29 d	3 23	570	2 46	*379*	*191*	14 17	26·0	*−10·2*	1 46	*36·2*	17 43	1182	4 26	*940*	242	5,5,3,2,3,4,5,4	31	2	82·1
30	0 1	548	16 50	473	75	4 35	29·7	12·6	0 40	17·1	17 9	1132	5 20	1069	63	3,4,2,2,2,3,1,2	19	1	82·1
31 q	16 48	528	11 43	502	26	13 30	22·5	12·5	21 35	10·0	22 17	1117	24 0	1105	12	1,1,1,1,1,1,0,3	9	0	82·1
Mean	- -	544	- -	486	59	- -	23·5	9·6	- -	13·9	- -	1130	- -	1089	41	-	12·5	0·55	82·2

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

106 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	527	516	517	518	517	524	526	526	524	517	513	513	517	525	528	528	525	524	523	524	524	525	524	524	522
2	526	523	524	526	529	530	531	536	528	524	515	504	501	496	504	492	508	515	508	508	517	515	515	529	517
3	529	510	516	508	520	528	526	524	520	520	513	516	513	512	512	511	517	524	524	525	528	525	522	524	519
4	524	521	520	524	521	524	529	528	526	517	511	516	524	532	535	535	533	528	525	523	522	520	526	528	525
5 d	532	528	523	526	536	559	547	512	520	493	497	503	504	504	504	511	515	524	525	509	504	521	525	519	518
6	531	519	511	517	524	530	536	535	524	492	488	500	521	527	526	524	524	524	514	524	518	522	521	526	520
7	523	521	523	525	526	528	530	525	526	507	505	512	515	517	522	524	522	516	515	522	526	524	524	525	521
8	522	528	533	521	521	526	529	531	513	501	498	500	497	496	501	518	517	524	529	529	529	520	513	542	518
9	522	515	516	520	524	524	511	533	526	504	507	508	495	511	511	519	516	522	517	524	523	518	521	541	518
10	521	522	522	528	528	528	531	531	523	496	508	516	517	519	521	524	524	527	524	523	523	524	524	529	522
11	542	524	521	529	524	531	533	539	530	515	514	513	513	516	520	519	499	520	527	528	528	530	528	528	524
12	525	521	525	524	524	530	524	535	524	508	496	495	502	509	516	523	524	519	528	527	526	525	533	524	520
13 q	526	527	526	527	531	532	533	531	528	518	510	511	513	515	517	527	528	528	531	532	530	529	528	531	525
14	531	531	531	532	534	539	541	541	533	520	517	521	516	524	533	536	539	539	535	531	525	517	508	524	529
15 d	528	544	516	519	514	528	540	534	525	493	504	503	502	535	528	511	511	517	521	505	531	526	512	504	519
16 d	508	532	515	513	517	520	522	511	519	513	499	501	509	512	492	507	512	512	523	493	513	515	524	536	*513*
17	519	517	518	523	526	532	528	526	521	521	512	502	509	510	523	531	508	524	520	513	531	517	518	510	519
18	527	515	521	520	521	520	528	533	531	524	516	513	515	517	517	519	527	528	528	528	527	524	532	535	524
19 q	517	527	524	522	524	523	528	535	530	524	520	520	525	527	525	525	528	529	531	532	531	531	537	531	527
20 q	527	524	526	530	532	536	539	542	540	531	524	522	517	524	526	530	517	528	532	533	532	529	528	528	529
21 q	529	529	531	532	532	536	540	539	537	532	528	521	521	525	531	532	529	529	530	532	528	523	526	527	530
22	531	531	535	532	533	539	542	540	535	528	531	531	524	526	531	529	528	531	532	531	536	533	536	541	533
23	531	531	530	532	535	536	538	538	536	532	530	535	534	548	535	525	524	532	539	537	535	537	532	531	*534*
24	528	534	532	536	542	537	543	544	540	527	524	521	524	526	532	529	529	537	532	528	516	531	533	529	531
25	544	547	517	526	527	536	543	537	536	522	514	516	516	517	521	519	522	528	532	536	521	526	528	531	528
26 d	527	529	532	530	525	535	539	535	531	525	519	518	520	522	532	505	502	493	502	504	524	500	512	525	520
27 d	537	522	517	514	519	520	521	524	506	508	513	515	522	513	516	523	521	515	515	545	504	508	521	527	519
28	523	523	516	518	519	515	526	524	516	511	510	511	516	520	524	517	508	519	529	522	524	528	528	526	520
Mean	527	525	523	524	526	530	*532*	532	527	515	*512*	513	514	519	521	521	520	523	525	524	524	523	524	528	523

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

107 ESKDALEMUIR (D) — 12° + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	18·4	17·6	18·3	19·2	18·6	17·8	16·9	17·1	16·9	16·9	17·3	18·9	20·1	19·9	19·0	17·8	17·8	18·1	18·0	17·8	17·8	17·0	16·9	16·9	18·0
2	17·2	17·1	17·9	18·0	17·9	18·0	18·4	18·1	17·6	19·0	19·6	21·5	22·4	23·9	25·1	21·3	22·3	20·3	19·0	13·8	14·8	16·3	14·2	15·8	*18·7*
3	14·2	14·4	17·4	18·8	18·9	17·1	17·3	17·3	17·3	18·3	18·7	20·5	20·6	21·8	21·3	20·9	19·3	18·8	18·6	18·1	17·8	17·2	17·0	16·0	18·2
4	16·5	16·9	17·0	16·5	16·2	18·0	16·4	16·5	16·4	17·1	18·6	20·1	21·5	21·9	20·6	19·0	18·5	18·6	18·8	18·8	18·5	17·6	16·5	16·8	18·1
5 d	16·9	15·4	16·9	16·9	18·7	26·3	20·5	15·1	16·8	15·7	18·7	19·7	20·8	22·3	21·9	19·9	18·8	18·7	18·6	17·8	15·9	16·4	15·4	15·8	18·3
6	18·6	13·3	17·4	18·5	18·6	17·5	18·2	21·0	20·0	19·3	22·4	23·4	21·6	21·6	20·3	18·3	17·6	17·5	17·1	17·7	15·7	16·9	16·1	16·0	18·5
7	16·1	17·1	17·6	17·7	17·8	17·8	17·7	17·3	16·2	17·0	17·4	18·7	19·9	21·0	21·4	20·6	19·6	18·5	15·5	16·4	17·9	17·1	16·8	16·8	17·9
8	16·3	17·6	17·8	16·7	16·6	17·8	17·0	16·9	18·4	17·6	18·7	22·6	23·5	24·3	23·1	20·1	18·3	12·5	18·6	18·0	17·5	15·3	13·1	16·0	18·1
9	10·0	12·7	15·5	17·1	16·7	15·8	17·5	19·4	18·3	16·8	17·5	20·5	21·0	20·0	21·0	17·8	19·1	18·8	17·1	12·1	16·0	14·5	14·8	14·3	16·8
10	15·7	16·7	17·9	20·6	17·1	16·7	16·5	17·3	17·0	16·3	18·1	18·3	19·7	20·3	19·7	19·0	18·1	17·1	17·4	15·4	16·8	16·8	16·3	16·6	17·6
11	15·7	15·6	16·6	15·9	19·3	17·7	20·1	17·8	17·1	15·4	15·5	17·9	19·5	20·3	20·3	19·7	16·8	18·5	17·3	16·7	15·7	16·8	16·9	16·9	17·5
12	16·7	17·1	18·4	18·1	18·0	17·2	18·9	15·8	14·8	13·4	14·9	18·2	20·3	21·5	20·8	19·5	18·0	16·6	17·5	16·8	16·5	16·3	15·2	16·5	17·4
13 q	16·8	17·8	18·3	17·7	18·1	17·2	16·6	16·0	15·3	15·0	16·4	19·4	20·6	21·3	21·5	19·8	18·6	17·9	17·3	17·0	17·0	16·1	16·8	17·1	17·7
14	17·1	17·6	17·6	17·8	17·8	17·8	17·3	16·8	15·6	15·2	16·5	19·2	20·8	22·3	22·3	21·2	20·7	20·0	19·7	20·4	19·8	15·3	14·2	16·0	18·3
15 d	17·9	19·9	11·1	10·0	11·8	14·9	14·5	15·7	15·5	17·0	20·9	23·2	22·3	22·4	24·3	23·3	23·7	24·4	21·7	17·9	14·9	6·0	6·5	9·8	17·1
16 d	17·0	17·0	12·4	13·9	14·1	15·1	15·5	17·1	16·4	17·3	18·4	19·1	20·6	24·1	24·7	23·5	22·7	22·3	7·5	18·0	17·8	14·5	14·5	12·4	17·3
17	14·9	14·8	14·7	17·0	17·8	16·8	16·6	16·6	16·7	16·4	18·0	18·7	21·3	21·1	21·4	22·2	18·6	19·4	18·4	14·6	6·5	15·5	14·6	16·0	17·0
18	13·5	13·4	16·5	16·6	16·5	16·8	17·5	16·2	16·0	16·0	16·6	17·9	20·3	21·8	22·9	22·1	20·7	19·1	18·4	17·8	17·3	17·0	16·6	12·0	17·5
19 q	11·0	13·2	13·6	14·2	14·6	15·7	17·4	15·9	15·6	15·4	17·1	18·5	20·5	22·4	22·5	21·5	20·1	18·9	18·1	17·9	17·3	16·0	14·7	14·5	16·9
20 q	15·3	15·1	16·9	16·9	17·3	17·2	16·9	16·9	16·1	14·9	15·3	17·3	18·6	20·9	21·9	22·0	20·6	18·9	18·6	18·4	18·0	17·3	15·4	15·3	17·6
21 q	16·1	17·0	17·4	17·0	17·2	17·9	17·1	16·9	16·2	16·0	17·0	18·8	20·2	21·2	21·2	19·1	18·1	18·0	18·0	17·9	17·4	16·0	16·6	16·5	17·7
22	17·2	17·1	17·0	16·7	16·8	16·7	16·6	16·5	16·0	16·1	17·2	20·6	21·3	22·5	23·2	21·2	20·5	19·9	18·9	17·2	17·4	15·2	9·9	12·5	17·7
23	14·3	15·6	16·6	16·9	17·1	16·9	16·6	16·8	16·7	16·2	17·1	19·7	19·9	24·0	23·0	22·0	19·4	19·1	19·2	18·5	17·7	17·6	17·2	15·8	18·1
24	15·3	16·7	16·8	17·2	17·3	16·9	17·7	17·9	17·2	16·6	17·7	19·4	21·5	22·0	22·2	19·9	18·5	18·3	19·5	19·3	15·0	16·7	16·8	16·0	18·0
25	7·7	4·2	14·8	14·7	17·2	17·1	18·0	18·1	18·2	18·6	18·3	17·4	19·2	21·1	21·8	20·4	18·9	18·8	18·7	18·1	5·9	14·9	16·5	15·6	16·4
26 d	16·3	17·1	16·4	17·1	17·0	17·2	16·5	16·6	16·8	17·9	18·5	20·6	22·7	23·4	23·2	17·8	19·3	10·8	0·7	12·8	1·7	8·7	14·1	17·5	*15·9*
27 d	18·3	15·8	15·8	15·7	16·5	16·9	17·0	16·5	17·5	15·5	16·4	19·0	21·6	21·7	23·3	18·9	18·5	17·7	15·3	6·1	5·4	11·7	16·2	17·1	16·4
28	15·7	16·0	17·4	16·8	16·6	16·9	16·1	15·5	15·6	16·8	18·3	19·9	20·7	21·1	21·5	19·8	16·5	16·9	10·9	16·8	16·6	15·9	15·7	16·5	17·1
Mean	15·6	15·7	16·5	16·8	17·1	17·3	17·3	17·0	16·7	16·6	17·7	19·6	20·8	21·9	*22·0*	20·3	19·3	18·4	16·9	16·7	15·2	15·5	*15·2*	15·5	17·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

108 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — FEBRUARY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1102	1106	1105	1105	1105	1105	1106	1106	1106	1109	1107	1106	1105	1105	1107	1109	1108	1110	1111	1108	1108	1107	1108	1106	1107
2	1107	1107	1107	1107	1107	1106	1106	1105	1105	1106	1105	1106	1110	1113	1123	1134	1128	1124	1126	1129	1122	1117	1117	1107	*1113*
3	1095	1096	1100	1105	1104	1106	1106	1106	1107	1105	1106	1107	1111	1112	1113	1113	1114	1113	1113	1112	1111	1111	1111	1109	1108
4	1107	1106	1107	1106	1106	1105	1105	1105	1106	1107	1107	1105	1103	1106	1107	1107	1107	1109	1108	1110	1111	1111	1110	1104	1107
5 d	1099	1099	1102	1105	1101	1075	1066	1087	1093	1110	1111	1112	1111	1111	1115	1118	1116	1113	1112	1117	1124	1116	1112	1111	1106
6	1086	1084	1095	1099	1099	1099	1100	1097	1100	1107	1110	1111	1108	1110	1111	1113	1113	1113	1116	1113	1114	1113	1111	1107	1105
7	1106	1106	1107	1107	1107	1106	1107	1107	1107	1109	1107	1106	1105	1104	1107	1112	1112	1114	1117	1114	1111	1111	1111	1110	1109
8	1110	1105	1093	1086	1093	1100	1104	1104	1106	1111	1110	1106	1107	1111	1117	1117	1120	1122	1114	1112	1111	1114	1117	1089	1107
9	1075	1081	1092	1097	1101	1101	1105	1101	1100	1101	1103	1104	1106	1108	1113	1119	1119	1114	1116	1117	1113	1113	1109	1100	1105
10	1098	1100	1101	1100	1100	1101	1102	1101	1103	1106	1104	1098	1098	1101	1107	1110	1110	1109	1110	1111	1111	1111	1111	1107	1105
11	1096	1096	1100	1101	1099	1096	1096	1096	1101	1107	1105	1101	1101	1105	1109	1116	1125	1117	1113	1111	1110	1108	1108	1107	1105
12	1106	1106	1106	1106	1102	1101	1098	1096	1103	1109	1105	1100	1100	1102	1107	1111	1112	1113	1110	1109	1108	1109	1107	1106	1105
13 q	1106	1106	1106	1107	1105	1104	1101	1103	1106	1106	1105	1102	1103	1106	1107	1110	1111	1111	1108	1107	1107	1108	1107	1107	1106
14	1106	1107	1107	1106	1105	1104	1102	1101	1102	1107	1102	1100	1099	1099	1101	1102	1105	1107	1108	1111	1117	1136	1132	1120	1108
15 d	1111	1075	1072	1082	1093	1096	1099	1098	1099	1104	1095	1095	1096	1101	1108	1118	1122	1125	1132	1147	1142	1122	1108	1106	1106
16 d	1089	1075	1088	1096	1104	1105	1105	1105	1103	1104	1101	1102	1103	1106	1117	1130	1131	1134	1140	1136	1128	1129	1123	1110	1111
17	1107	1107	1108	1107	1102	1101	1103	1104	1105	1107	1106	1106	1105	1105	1107	1115	1125	1124	1123	1125	1120	1111	1110	1105	1110
18	1097	1102	1102	1107	1107	1107	1104	1104	1105	1105	1102	1099	1100	1102	1108	1117	1117	1114	1113	1111	1110	1111	1111	1101	1107
19 q	1099	1098	1099	1101	1101	1104	1104	1101	1104	1105	1100	1096	1095	1098	1104	1108	1111	1111	1110	1110	1109	1109	1107	1102	1104
20 q	1104	1104	1104	1105	1105	1104	1104	1102	1102	1105	1101	1096	1098	1099	1100	1106	1113	1112	1111	1110	1110	1111	1113	1111	1105
21 q	1108	1106	1105	1105	1105	1103	1102	1100	1100	1102	1099	1095	1094	1091	1096	1105	1106	1107	1106	1107	1108	1111	1110	1107	1103
22	1105	1104	1101	1102	1102	1102	1101	1101	1102	1106	1101	1097	1098	1095	1101	1103	1107	1106	1108	1109	1108	1111	1107	1101	1103
23	1098	1099	1101	1100	1101	1099	1099	1099	1102	1104	1098	1091	1088	1086	1095	1101	1105	1101	1101	1102	1104	1105	1106	1106	1100
24	1105	1101	1101	1100	1099	1100	1096	1094	1099	1104	1100	1099	1099	1096	1099	1102	1105	1104	1104	1110	1116	1111	1108	1108	1103
25	1090	1075	1087	1092	1092	1092	1092	1095	1099	1106	1106	1104	1098	1096	1101	1107	1108	1107	1104	1104	1116	1105	1104	1101	*1099*
26 d	1102	1103	1102	1102	1098	1095	1095	1095	1097	1102	1104	1105	1103	1101	1104	1136	1155	1147	1154	1127	1123	1100	1099	1092	1110
27 d	1081	1087	1096	1102	1104	1104	1101	1101	1104	1104	1099	1101	1101	1105	1113	1126	1124	1124	1123	1099	1105	1112	1109	1107	1105
28	1105	1101	1102	1104	1106	1106	1106	1105	1106	1106	1106	1105	1105	1107	1109	1117	1122	1116	1117	1111	1107	1107	1106	1106	1108
Mean	1100	*1098*	1100	1101	1102	1101	1101	1101	1103	1106	1104	1102	1102	1103	1107	1114	*1116*	1115	1115	1114	1114	1112	1110	1105	1106

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

109 ESKDALEMUIR — FEBRUARY 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	h. m.	γ	γ					°A.
1 q	14 58	533	510	10 42	*23*	3 12	21·1	16·5	9 12	*4·6*	18 22	1112	1101	0 40	*11*	2,2,1,0,1,1,1,0	8	0	82·1
2	24 0	544	477	15 21	67	14 54	27·9	10·7	23 59	17·2	15 20	1137	1099	24 0	38	1,0,1,2,2,3,3,3	15	1	82·1
3	0 8	551	504	15 20	47	14 1	22·4	10·8	0 1	11·6	16 7	1117	1094	0 41	23	3,2,0,1,1,2,0,1	10	0	82·1
4	23 58	543	509	10 52	34	13 28	22·1	15·6	0 1	6·5	22 0	1112	1100	24 0	12	0,2,1,1,1,1,0,2	8	0	82·1
5 d	5 25	574	488	9 34	86	5 15	*28·4*	13·3	7 9	15·1	20 4	1126	*1063*	6 12	63	2,3,4,2,2,1,3,1	18	1	82·1
6	0 20	552	480	10 48	72	11 18	24·8	11·4	1 18	13·4	20 50	1118	1076	0 50	42	3,2,2,3,1,2,2,2	17	1	82·1
7	23 15	532	493	10 5	39	14 18	21·9	11·1	18 42	10·8	18 52	1119	1102	13 10	17	1,1,2,2,1,2,3,1	13	1	82·1
8	23 12	556	484	10 9	72	13 58	26·2	8·7	17 16	17·5	17 20	1125	1081	3 4	44	2,2,2,2,2,3,1,3	17	1	82·1
9	23 35	564	482	12 23	82	12 5	22·7	6·9	0 8	15·8	16 19	1120	1069	0 54	51	3,2,3,3,2,3,2,3,3	21	1	82·1
10	23 58	544	484	9 48	60	3 14	22·2	14·4	0 2	7·8	19 52	1113	1096	11 40	17	2,2,1,3,1,1,1,2	13	1	82·1
11	0 16	551	487	16 31	64	6 38	22·9	13·7	0 13	9·2	16 25	1128	1092	5 27	36	2,2,2,2,1,3,1,1	14	1	82·1
12	22 12	551	493	10 56	58	13 20	21·9	12·5	22 11	9·4	17 32	1115	1095	6 48	20	2,2,3,2,1,2,0,2	14	0	82·1
13 q	6 0	536	504	10 50	32	14 14	22·3	14·7	9 13	7·6	16 2	1112	1101	11 52	*11*	1,0,1,1,1,1,0,1	6	0	82·1
14	17 20	547	497	22 39	50	13 16	23·1	12·5	22 2	10·6	21 57	1143	1096	13 31	47	0,0,1,1,2,1,2,3	10	1	82·1
15 d	20 53	572	481	12 3	91	14 5	25·5	2·3	21 29	23·2	19 57	*1165*	*1063*	2 0	*102*	4,3,2,3,3,2,4,4	25	1	82·1
16 d	18 29	575	469	18 9	106	14 26	26·0	−2·5	18 16	28·5	18 12	1155	1069	1 20	86	4,2,2,2,3,2,5,3	23	1	81·9
17	20 13	563	489	19 53	74	15 23	23·4	−0·7	20 4	24·1	19 55	1131	1095	24 0	36	2,1,2,2,2,3,4,2	18	1	81·9
18	22 48	571	510	1 8	61	14 51	24·7	10·7	23 53	14·0	15 42	1119	1095	0 7	24	3,1,2,1,2,2,0,3	14	0	81·9
19 q	23 5	544	513	0 42	31	13 12	23·0	10·3	0 29	12·7	16 29	1112	1094	12 10	18	2,1,2,1,1,0,1,2	10	0	82·0
20 q	7 50	547	512	16 48	35	14 50	22·7	14·8	9 32	7·9	16 44	1117	1095	11 27	22	1,1,1,1,2,2,0,1	9	0	82·0
21 q	6 59	543	517	11 49	26	14 2	21·9	15·0	21 54	6·9	21 35	1112	1089	13 33	23	1,1,0,1,1,1,1,1	7	0	82·0
22	22 0	568	513	14 19	55	14 27	25·9	8·0	22 20	17·9	21 33	1112	1093	13 30	19	1,1,0,2,3,1,2,3	13	1	82·0
23	13 22	553	515	16 10	38	14 16	25·6	12·9	23 58	12·7	16 5	1107	1083	13 15	24	1,0,0,2,3,2,2,2	12	1	82·0
24	6 56	548	510	10 55	38	12 29	23·2	12·3	0 5	10·9	20 47	1119	1095	7 21	24	2,1,1,2,1,2,2,2	13	1	82·0
25	1 15	590	489	20 25	101	14 32	23·2	−3·6	20 35	26·8	20 32	1123	1068	1 22	55	4,2,1,2,2,1,5,2	19	1	82·0
26 d	20 35	560	*461*	17 50	99	14 0	24·8	*−6·6*	18 18	*31·4*	16 18	1160	1086	24 0	74	1,2,1,2,2,5,4,4	21	1	82·0
27 d	19 22	*642*	469	19 49	*173*	14 45	25·0	−3·5	19 56	28·5	15 52	1129	1077	0 25	52	3,2,3,2,3,3,5,3	24	1	82·0
28	18 39	555	497	16 25	58	14 34	22·5	5·1	18 32	17·4	16 20	1123	1100	1 50	23	2,2,1,1,1,2,4,1	14	1	82·0
Mean	- -	557	494	- -	63	- -	23·8	8·8	- -	15·0	- -	1124	1088	- -	36	-	14·5	0·68	82·0

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

110 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	528	528	528	526	530	529	531	529	525	515	503	501	513	514	518	521	523	528	530	529	532	531	531	531	524
2	531	531	532	532	532	535	535	537	531	522	509	511	511	513	516	524	512	533	537	540	538	540	539	538	528
3	544	551	528	525	531	527	532	540	532	510	511	513	504	512	520	524	512	517	516	521	522	527	528	526	524
4 q	528	528	528	525	528	529	530	533	533	521	516	512	517	515	521	528	528	531	533	533	529	532	531	546	527
5	535	529	523	528	531	532	539	539	536	521	516	512	511	512	531	535	531	517	484	484	489	497	508	521	519
6	528	530	518	520	524	528	521	518	520	511	499	489	489	495	512	525	508	503	520	516	516	521	528	530	515
7	534	522	520	521	520	524	529	523	512	493	501	500	509	516	530	532	524	516	535	534	536	534	532	535	522
8	543	536	532	508	535	537	543	535	515	516	526	504	511	511	524	516	488	521	531	535	535	533	532	533	525
9	532	531	530	528	528	530	530	531	529	525	516	510	514	525	528	528	530	520	508	509	511	524	544	524	524
10	522	522	527	527	529	532	533	528	524	516	513	514	520	525	529	534	533	536	540	541	541	544	544	536	*530*
11 d	575	490	511	484	525	528	529	524	513	493	482	504	493	497	508	515	507	522	493	512	512	512	512	520	511
12 d	525	511	517	505	515	509	516	509	501	485	489	502	520	551	521	532	541	508	498	508	524	462	481	485	509
13	500	504	505	508	513	515	514	508	499	493	489	476	492	508	520	517	513	512	514	522	524	520	520	521	509
14	520	520	518	520	520	517	519	520	514	498	493	491	501	510	513	517	508	524	525	529	528	528	512	503	515
15 d	542	489	411	514	501	523	513	513	521	509	500	501	511	537	528	511	535	520	499	492	493	482	528	501	*507*
16	485	501	516	519	515	499	510	512	504	504	473	486	510	515	512	520	517	521	520	517	522	529	528	527	511
17	512	504	513	516	519	522	521	517	519	510	505	508	516	523	523	523	520	522	518	521	524	528	539	541	519
18	523	521	520	520	524	524	532	535	528	515	508	509	501	500	516	513	524	516	524	524	539	551	528	544	522
19	513	521	524	524	525	528	528	528	522	515	508	502	508	520	520	521	525	533	532	534	535	533	534	533	524
20	545	528	513	524	528	535	532	527	520	511	507	502	506	516	520	525	531	524	531	541	489	490	505	510	519
21	515	516	512	514	521	527	531	534	528	514	505	510	518	524	532	533	530	540	520	516	527	529	528	530	523
22 q	523	520	518	524	528	528	528	528	521	512	508	509	508	510	515	520	526	529	534	536	535	535	534	533	523
23 q	531	530	532	532	531	530	532	527	517	504	496	501	502	509	515	520	528	530	535	534	535	535	534	534	524
24	534	536	536	536	540	538	532	528	526	501	497	501	508	520	511	533	524	520	535	541	543	539	532	533	527
25	532	524	524	526	530	530	531	529	524	509	504	497	497	500	517	535	533	525	535	544	544	544	544	548	526
26 d	575	527	501	523	526	532	563	516	465	468	503	521	516	512	485	504	488	521	502	534	508	517	542	559	517
27	517	513	503	519	524	532	527	525	524	509	476	488	489	509	517	516	520	524	563	547	526	525	548	540	520
28 d	538	537	539	548	555	550	551	524	528	537	525	446	532	469	489	508	513	509	516	517	520	520	520	516	521
29	513	517	516	516	523	515	515	512	492	478	461	461	492	517	520	512	523	525	524	524	525	528	515	522	510
30 q	521	518	518	524	528	524	524	516	501	488	481	488	501	506	519	520	523	527	528	529	530	529	528	530	517
31 q	535	530	530	528	529	532	532	527	513	500	494	496	504	513	523	532	532	528	533	536	536	548	545	531	525
Mean	529	521	517	521	526	527	*529*	525	517	507	501	*499*	507	513	518	522	521	523	523	526	525	525	528	528	520

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

111 ESKDALEMUIR (D) — 12° + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	16·5	17·1	18·1	17·4	16·7	16·1	15·9	15·6	14·5	14·7	16·8	18·8	20·1	21·1	20·8	19·4	17·5	17·2	17·6	17·1	17·0	16·6	16·5	16·3	17·3
2	16·5	16·8	16·7	16·7	16·7	16·7	16·4	16·0	15·3	14·7	16·0	20·2	21·7	23·2	23·0	22·5	16·5	18·9	18·7	18·0	17·4	17·0	16·8	16·5	17·9
3	16·8	11·8	10·6	15·4	17·0	16·9	16·5	15·5	15·2	15·5	17·2	20·1	20·6	21·4	21·1	20·9	19·8	18·7	15·6	16·0	16·3	16·0	15·5	15·9	16·9
4 q	16·2	16·2	17·4	16·3	17·0	16·7	16·2	16·0	15·4	14·4	15·2	17·1	20·3	21·4	20·9	19·7	19·5	18·9	18·7	18·3	17·5	17·1	16·2	13·3	17·3
5	13·0	12·1	15·0	15·6	15·8	16·8	16·2	15·8	15·1	14·1	15·2	19·0	21·8	23·5	24·4	23·5	22·1	25·1	16·0	14·4	5·2	3·4	13·8	15·1	16·3
6	17·8	16·2	15·7	16·0	16·4	16·4	16·1	15·9	14·4	13·8	16·1	19·4	24·2	23·7	24·4	21·8	17·1	9·9	12·2	11·5	13·3	14·2	16·1	14·2	16·5
7	15·2	16·3	18·0	16·8	16·5	16·2	16·6	17·0	16·3	16·4	18·3	19·6	22·2	22·6	22·4	20·7	19·7	17·0	16·3	17·5	17·8	17·1	16·1	16·9	17·9
8	18·5	16·8	15·1	17·9	21·1	14·5	15·2	15·2	16·9	16·2	19·1	22·4	25·2	25·0	23·1	22·1	21·9	17·3	19·1	18·1	17·9	17·3	16·9	16·9	*18·7*
9	16·8	16·8	16·7	16·3	16·2	15·8	15·5	15·5	15·3	14·9	16·7	19·1	21·1	21·5	20·7	19·2	18·3	17·3	15·8	11·4	13·7	13·2	14·0	15·0	16·5
10	15·0	17·6	16·7	16·1	15·4	15·8	15·4	15·0	13·9	14·1	15·4	18·6	20·4	21·2	20·4	19·7	18·4	17·8	18·3	18·5	18·0	17·8	17·8	14·9	17·2
11 d	12·4	10·7	7·3	20·1	13·6	11·3	13·4	14·2	14·5	16·4	19·5	21·3	23·7	23·8	23·4	20·5	24·8	20·7	16·8	17·9	17·0	16·6	16·3	13·1	17·1
12 d	14·5	16·0	15·8	16·3	15·7	15·0	15·8	14·3	14·9	16·6	16·1	23·0	20·5	24·6	25·1	18·6	20·7	16·2	9·7	12·5	3·1	5·2	−9·6	5·2	14·4
13	12·2	17·3	17·4	17·6	17·0	18·1	18·3	18·7	20·1	19·7	20·4	21·4	22·5	21·6	19·6	19·7	18·6	17·5	16·5	15·9	16·1	16·3	16·7	16·7	18·2
14	16·9	16·4	16·2	16·6	15·8	14·4	14·8	13·4	13·1	13·7	17·1	20·6	20·2	20·5	20·5	20·3	17·8	17·7	17·8	16·9	10·6	8·2	5·0	8·5	15·5
15 d	9·3	1·6	3·4	8·2	2·7	14·0	17·7	22·0	16·9	15·5	16·2	20·3	20·5	23·7	24·3	26·6	21·4	20·7	5·0	8·1	7·7	13·4	16·9	4·5	*14·2*
16	16·7	13·8	9·7	13·2	11·3	13·0	14·0	12·8	12·5	14·0	17·0	20·5	23·0	24·4	21·9	22·4	21·7	9·7	14·1	16·5	14·2	9·9	16·7	17·2	15·8
17	14·3	16·9	18·7	15·4	15·3	15·4	15·2	15·7	14·7	15·1	16·9	19·4	21·9	23·1	22·7	20·4	18·8	16·9	16·0	14·3	13·1	15·2	12·9	14·3	16·8
18	14·5	12·6	13·0	12·2	14·3	14·7	14·9	14·1	13·7	14·4	16·4	20·3	23·6	23·3	22·6	20·7	19·6	13·6	15·2	17·8	16·6	12·9	12·1	14·1	16·1
19	12·2	17·1	16·4	15·2	16·1	15·4	16·0	15·0	13·8	14·3	15·9	18·8	21·6	22·4	22·4	20·5	18·7	17·7	17·1	16·9	15·3	16·2	16·8	16·8	17·0
20	17·1	11·7	14·2	16·0	15·9	15·0	15·1	14·3	13·7	14·9	18·5	21·2	23·3	23·2	22·6	20·9	20·1	18·9	18·8	17·3	9·7	0·7	10·1	11·7	16·0
21	16·0	16·0	15·2	13·4	15·2	15·8	15·5	14·4	13·7	15·1	18·6	19·8	22·6	22·4	21·9	21·1	18·7	18·0	7·9	10·6	17·7	17·1	15·8	15·2	16·6
22 q	16·0	16·5	16·9	17·1	16·0	16·0	15·2	14·3	14·1	15·1	17·8	20·5	21·5	21·6	20·7	18·8	17·6	16·9	16·9	17·0	16·9	16·9	16·9	17·0	17·3
23 q	16·8	16·6	17·1	16·2	15·1	15·9	15·0	14·2	13·8	14·5	16·8	19·9	22·4	22·5	22·3	20·5	18·6	17·5	17·3	17·1	16·2	16·0	17·0	17·0	17·3
24	16·9	16·6	16·1	16·0	15·8	15·0	15·1	14·2	12·8	13·0	18·4	19·8	22·8	25·3	23·8	25·9	25·1	21·7	19·5	18·3	17·8	18·5	16·0	16·0	18·3
25	16·0	16·5	15·2	15·4	15·6	15·8	15·6	14·2	13·2	14·0	16·3	19·3	22·5	24·2	23·2	20·9	20·5	16·9	16·9	18·0	17·8	15·4	16·2	22·3	17·6
26 d	13·3	0·7	5·2	12·0	15·0	21·4	15·6	19·6	16·6	21·9	19·4	19·9	22·2	24·6	22·6	27·0	24·1	18·8	8·3	0·7	13·8	13·9	15·4	17·3	16·2
27	17·3	14·9	20·3	17·7	15·6	14·5	13·3	12·9	12·9	14·3	18·9	23·7	24·2	22·5	23·5	18·6	17·9	15·1	4·3	0·8	9·8	12·4	17·7	17·4	15·9
28 d	16·0	17·0	18·2	16·1	16·0	14·2	14·9	15·6	16·0	14·0	18·8	20·3	24·5	28·1	21·2	20·5	19·0	17·8	17·8	17·7	17·0	16·9	16·5	16·2	17·9
29	16·1	16·3	16·7	16·0	16·4	18·7	18·7	16·6	14·2	17·2	18·9	24·1	23·3	22·6	22·3	17·9	16·8	16·1	16·0	16·0	11·8	9·7	11·7	16·1	17·1
30 q	16·5	16·1	16·0	16·0	15·5	15·1	13·7	11·9	11·8	14·1	17·9	21·2	23·1	22·5	21·7	19·5	17·0	16·3	16·7	16·1	16·0	16·2	16·2	16·3	16·8
31 q	16·3	16·2	15·9	15·9	15·9	15·4	14·7	13·3	12·3	13·3	16·5	19·9	22·3	23·2	22·3	20·1	17·4	15·9	16·5	16·9	16·5	15·7	11·5	8·8	16·4
Mean	15·5	14·7	15·0	15·7	15·4	15·7	15·6	15·3	14·6	15·2	17·4	20·3	22·3	*23·1*	22·3	21·0	19·5	17·4	15·3	15·0	14·5	*14·0*	14·3	14·7	16·8

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

112 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MARCH 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1106	1106	1104	1102	1103	1104	1102	1101	1101	1102	1101	1100	1099	1102	1107	1111	1111	1108	1107	1106	1105	1106	1106	1106	1104
2	1107	1106	1106	1106	1106	1105	1103	1102	1104	1104	1099	1095	1094	1097	1101	1112	1123	1112	1108	1105	1105	1104	1103	1104	1105
3	1100	1089	1088	1088	1087	1092	1094	1094	1095	1100	1095	1095	1098	1095	1099	1110	1117	1118	1122	1117	1114	1111	1109	1108	1101
4 q	1106	1106	1105	1106	1105	1105	1103	1101	1101	1106	1101	1096	1094	1095	1099	1105	1107	1107	1107	1110	1111	1110	1110	1100	1104
5	1093	1094	1099	1101	1101	1101	1101	1101	1102	1106	1100	1094	1094	1096	1104	1117	1140	1167	1202	1165	1148	1126	1116	1105	1116
6	1105	1093	1100	1105	1107	1106	1107	1106	1106	1107	1105	1096	1098	1105	1111	1116	1130	1141	1132	1129	1113	1113	1107	1101	1110
7	1089	1093	1101	1106	1107	1106	1104	1102	1107	1113	1111	1106	1100	1098	1102	1110	1117	1119	1118	1113	1111	1112	1111	1108	1107
8	1101	1099	1102	1104	1077	1087	1093	1098	1100	1101	1095	1094	1098	1108	1113	1123	1147	1136	1119	1113	1111	1112	1111	1110	1106
9	1107	1107	1107	1107	1107	1106	1106	1105	1106	1106	1101	1101	1101	1102	1105	1110	1113	1118	1124	1129	1125	1113	1093	1087	1108
10	1096	1101	1105	1106	1106	1106	1107	1111	1111	1111	1105	1099	1097	1099	1100	1104	1106	1106	1105	1105	1105	1106	1106	1107	1105
11 d	1063	1046	1045	1045	1059	1087	1093	1094	1100	1100	1105	1105	1110	1114	1142	1151	1147	1172	1177	1143	1130	1124	1120	1118	1108
12 d	1108	1108	1107	1107	1108	1102	1094	1099	1101	1108	1108	1101	1099	1100	1135	1179	1188	1214	1196	1172	1100	1087	1085	1056	*1119*
13	1087	1104	1111	1113	1113	1112	1112	1113	1114	1117	1119	1124	1125	1122	1124	1125	1125	1123	1120	1118	1116	1113	1113	1113	1116
14	1113	1113	1113	1112	1112	1111	1109	1108	1110	1110	1107	1105	1105	1101	1111	1118	1126	1119	1117	1116	1117	1118	1110	1105	1112
15 d	1046	975	943	1015	1051	1069	1067	1075	1081	1089	1093	1099	1101	1104	1116	1134	1130	1153	1172	1154	1123	1095	1022	1045	*1081*
16	1034	1063	1083	1082	1083	1094	1102	1105	1110	1111	1112	1112	1108	1116	1136	1153	1143	1161	1142	1126	1124	1119	1108	1084	1109
17	1100	1105	1095	1104	1110	1110	1107	1106	1101	1106	1102	1099	1101	1107	1111	1117	1121	1124	1124	1123	1118	1107	1101	1087	1108
18	1094	1099	1101	1105	1106	1105	1105	1105	1104	1105	1100	1096	1100	1105	1108	1116	1121	1128	1125	1117	1113	1101	1101	1089	1106
19	1095	1095	1100	1105	1106	1106	1107	1109	1109	1107	1100	1095	1095	1101	1107	1112	1113	1113	1112	1112	1112	1109	1107	1107	1106
20	1099	1090	1098	1101	1105	1106	1107	1111	1111	1105	1101	1100	1101	1104	1106	1113	1117	1119	1120	1124	1117	1116	1113	1110	1108
21	1112	1113	1114	1113	1111	1110	1110	1107	1106	1100	1096	1093	1093	1095	1100	1107	1112	1117	1141	1134	1118	1115	1113	1111	1110
22 q	1111	1111	1111	1107	1107	1108	1108	1111	1109	1107	1101	1100	1101	1105	1110	1112	1112	1112	1110	1109	1108	1109	1108	1108	1108
23 q	1107	1107	1106	1104	1104	1105	1106	1107	1105	1105	1100	1095	1096	1100	1107	1112	1112	1111	1110	1110	1108	1110	1107	1107	1106
24	1107	1106	1106	1105	1104	1104	1105	1106	1102	1100	1093	1089	1093	1096	1101	1107	1114	1116	1115	1112	1110	1112	1114	1111	1105
25	1095	1096	1102	1105	1105	1106	1106	1106	1104	1101	1096	1089	1089	1094	1099	1104	1118	1125	1116	1110	1108	1110	1108	1100	1104
26 d	1036	1039	1062	1078	1079	1059	1061	1070	1083	1088	1092	1098	1092	1102	1134	1161	1179	1150	1154	1147	1123	1114	1100	1057	1098
27	1069	1087	1088	1092	1100	1106	1106	1105	1100	1100	1100	1096	1095	1104	1113	1130	1132	1125	1126	1118	1107	1108	1089	1076	1103
28 d	1089	1094	1089	1092	1089	1093	1094	1093	1084	1087	1076	1090	1094	1126	1135	1123	1118	1115	1111	1110	1109	1111	1112	1113	1102
29	1114	1113	1113	1112	1111	1110	1106	1102	1103	1101	1101	1101	1105	1111	1121	1129	1126	1119	1114	1112	1112	1111	1105	1102	1111
30 q	1105	1108	1111	1110	1109	1111	1111	1110	1107	1106	1101	1099	1100	1108	1113	1117	1117	1115	1111	1111	1110	1111	1111	1110	1109
31 q	1108	1110	1111	1111	1110	1108	1111	1112	1110	1109	1105	1101	1100	1104	1111	1113	1116	1115	1112	1109	1108	1105	1099	1095	1108
Mean	1094	*1093*	1094	1098	1100	1101	1101	1102	1103	1104	1101	1099	1099	1104	1112	1121	1126	*1128*	1128	1122	1114	1110	1104	1098	1107

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

113 ESKDALEMUIR — MARCH 1945

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	20 39	535	492	10 45	43	12 58	22·0	14·0	8 25	*8·0*	16 3	1113	1096	12 11	17	2,1,1,2,2,2,0,0	10	0	82·0
2	21 37	544	493	16 3	51	13 27	24·7	14·3	9 29	10·4	16 30	1125	1093	13 12	32	0,0,1,1,3,3,1,1	10	1	82·0
3	1 23	563	501	12 20	62	13 31	22·6	8·0	2 9	14·6	18 11	1124	1084	4 38	40	3,2,2,2,1,3,2,0	15	0	82·0
4 q	23 16	553	508	11 39	45	13 49	22·2	11·6	23 30	10·6	20 50	1112	1093	12 10	19	1,1,2,2,2,2,1,2	13	0	82·0
5	16 26	551	470	19 3	81	17 0	29·1	−6·4	21 0	35·5	18 44	1215	1092	1 15	123	2,1,2,2,3,4,5,5	24	1	82·0
6	20 15	574	469	20 30	105	14 10	26·3	0·0	19 48	26·3	17 37	1143	1090	1 29	53	3,1,2,2,3,4,4,3	22	1	82·0
7	20 1	543	489	9 33	54	14 1	24·0	9·1	0 1	14·9	17 52	1123	1088	0 40	35	3,1,2,2,2,3,2,1	16	0	82·0
8	0 40	560	473	16 35	87	13 14	27·6	13·3	2 50	14·3	16 49	1158	1071	4 28	87	3,3,2,3,3,4,1,0	19	1	82·0
9	22 41	571	492	18 56	79	13 19	22·1	9·1	19 50	13·0	19 18	1131	1083	22 58	48	0,1,2,2,1,2,3,3	14	1	82·0
10	22 20	549	508	11 26	41	13 50	21·4	8·9	23 48	12·5	8 52	1113	1094	0 1	19	2,1,1,1,2,2,0,3	12	0	82·1
11 d	0 12	618	453	1 26	165	14 26	28·5	0·7	1 1	27·8	17 53	1208	1036	2 1	172	5,4,3,4,4,4,4,2	30	2	82·0
12 d	20 44	587	403	22 9	184	17 1	33·1	*−23·2*	22 27	*56·3*	17 23	*1233*	1041	23 18	192	2,2,2,4,4,5,6,5	30	2	82·0
13	20 48	531	466	11 44	65	12 22	23·1	9·6	0 10	13·5	15 0	1126	1069	0 1	57	3,1,2,3,3,2,2,1	17	0	82·0
14	23 51	543	485	11 22	58	11 40	21·5	2·5	22 43	19·0	16 10	1129	1093	24 0	36	0,1,2,1,2,3,3,3	15	1	82·0
15 d	22 21	*648*	*371*	2 45	*277*	22 3	*35·8*	−16·4	2 3	52·2	18 2	1180	*931*	2 38	*249*	6,4,4,3,4,5,4,6	36	2	82·0
16	22 54	555	455	10 28	100	13 2	25·8	3·4	17 33	22·4	17 21	1166	1028	0 44	138	4,3,2,3,3,4,3,4	26	1	82·0
17	22 58	571	497	1 45	74	13 35	24·7	9·6	20 36	15·1	17 55	1126	1086	23 29	40	3,1,2,1,1,2,3,3	16	0	82·0
18	21 20	568	484	13 19	84	13 0	25·0	10·5	22 9	14·5	17 42	1130	1087	23 40	43	2,2,2,2,3,2,3,3	19	1	82·0
19	17 50	540	498	12 2	42	13 7	23·1	10·2	0 22	12·9	16 35	1116	1089	0 1	27	2,1,1,2,2,1,1,1	11	0	82·0
20	20 10	552	436	20 50	116	12 27	23·8	−10·9	21 0	34·7	19 57	1129	1089	1 15	40	3,1,1,1,1,2,5,5	19	1	81·9
21	18 59	556	486	18 18	70	12 30	23·6	−3·1	18 53	26·7	18 50	1149	1090	11 59	59	1,1,2,1,1,2,4,1	13	1	81·8
22 q	20 59	539	504	10 25	*35*	13 6	22·2	13·4	8 8	8·8	15 29	1113	1099	11 40	*14*	2,1,1,1,1,0,0,0	6	0	81·8
23 q	21 10	543	492	10 22	51	14 4	23·2	13·3	8 15	9·9	15 29	1113	1095	11 28	18	1,1,0,1,1,0,0,1	5	0	81·8
24	19 54	558	488	10 2	70	15 36	26·8	11·5	9 5	15·3	18 18	1118	1088	11 19	30	1,1,1,2,2,3,2,2	14	1	81·8
25	23 58	586	489	13 19	97	23 50	33·2	12·7	8 37	20·5	17 15	1129	1057	24 0	72	2,1,1,1,2,4,2,4	17	1	81·8
26 d	23 21	608	440	8 51	168	15 37	29·9	−7·3	19 11	37·2	16 24	1189	1035	0 36	154	5,4,5,4,4,4,5,4	35	2	82·0
27	22 50	590	465	10 46	125	22 56	31·5	−2·0	19 13	33·5	15 52	1138	1054	0 1	84	3,3,2,3,3,4,4,5	27	1	82·0
28 d	13 0	588	*371*	11 20	217	13 36	*35·8*	9·7	7 20	26·1	13 53	1155	1070	10 40	85	3,3,4,6,6,4,3,2	31	1	82·0
29	21 45	539	449	11 16	90	11 48	25·7	8·1	21 21	17·6	16 10	1130	1100	10 40	30	2,2,3,3,3,2,2,3	20	1	82·1
30 q	24 0	536	481	10 42	55	12 29	24·1	10·5	8 29	13·6	15 16	1119	1096	11 46	23	0,2,1,1,1,2,1,1	9	0	82·1
31 q	0 14	560	493	10 42	67	13 58	23·6	8·1	23 27	15·5	16 49	1118	1093	23 10	25	1,0,1,0,0,2,1,3	8	0	82·1
Mean	− −	563	471	− −	92	− −	26·0	4·9	− −	21·1	− −	1141	1075	− −	66	−	18·0	0·74	81·9

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

114 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	529	531	524	524	530	538	516	473	450	431	438	457	469	497	469	457	489	512	517	516	508	497	512	520	*496*
2	514	504	525	508	504	503	516	503	504	488	481	486	477	488	499	513	515	501	528	520	524	524	524	522	507
3	522	522	524	517	520	522	523	519	512	502	500	501	508	516	524	522	522	523	524	527	525	528	528	526	519
4	526	528	528	528	529	532	530	524	512	498	493	493	505	524	522	511	501	520	531	529	528	529	528	530	520
5	530	531	533	533	535	536	537	533	528	520	512	497	500	512	510	515	536	528	503	525	508	481	510	520	520
6 d	521	523	524	524	527	527	525	514	508	489	485	497	501	493	516	523	512	542	536	532	535	535	534	551	520
7	536	527	528	502	513	509	497	508	516	501	492	484	489	497	503	520	528	531	536	535	534	547	564	516	517
8	520	516	513	512	524	529	528	521	501	481	489	486	508	519	511	544	527	545	531	530	531	529	533	531	519
9 q	531	526	524	522	520	524	522	517	509	500	493	493	500	510	520	527	531	531	532	536	535	535	535	533	521
10	534	532	532	535	532	535	534	525	515	505	500	500	505	501	520	527	539	538	537	536	537	538	537	545	527
11 d	543	544	543	545	542	543	538	539	536	508	508	531	496	493	544	506	508	509	508	513	517	512	529	517	524
12 d	500	461	497	509	492	520	525	504	492	491	488	491	497	512	520	540	538	531	533	531	575	528	502	525	513
13	507	511	516	516	508	520	538	508	500	495	492	489	496	509	518	517	520	531	540	535	540	528	527	539	517
14 d	528	513	508	507	521	522	518	508	504	487	494	502	504	508	524	528	535	562	536	533	531	528	520	520	518
15	524	531	519	521	520	517	501	516	509	502	493	473	488	495	509	525	526	533	535	533	536	537	526	528	517
16	529	525	523	524	524	524	520	509	512	504	497	495	495	508	519	528	539	536	541	531	535	531	532	540	522
17 q	533	532	524	526	525	523	530	525	517	508	498	495	501	508	516	524	535	539	537	535	536	537	536	537	524
18	537	535	533	532	532	528	530	531	528	511	500	493	500	508	521	530	535	539	541	544	540	533	535	544	527
19	533	542	529	529	531	543	544	544	536	530	528	516	504	515	532	531	536	543	551	562	555	536	543	535	535
20	542	550	540	535	536	544	544	542	541	528	512	497	499	505	504	521	536	535	539	540	537	532	532	532	530
21	540	536	532	531	532	532	531	530	524	516	506	502	508	516	521	528	532	541	543	541	544	544	539	537	529
22	525	528	529	531	533	531	528	526	520	515	508	501	505	516	527	528	544	544	539	544	547	529	534	538	528
23	538	540	536	539	537	539	536	537	533	521	508	501	512	522	539	555	520	519	532	543	551	543	543	540	533
24	541	530	531	537	532	524	516	508	520	517	519	512	528	535	540	539	544	543	557	537	532	535	537	541	531
25	539	543	536	526	528	532	532	525	515	517	520	515	517	526	527	532	537	539	536	537	535	533	540	533	530
26 q	535	532	531	533	532	534	532	526	521	517	516	524	529	535	546	527	534	539	536	537	538	540	539	542	532
27 q	542	538	539	537	528	530	531	529	521	515	514	514	513	519	526	532	536	537	536	540	540	547	542	539	531
28 q	536	537	539	537	536	536	532	528	522	510	507	512	517	521	530	536	538	542	541	540	542	544	551	548	533
29	548	549	544	540	539	538	539	537	532	524	513	515	513	520	535	524	538	544	551	563	564	556	558	549	*539*
30	547	541	533	533	537	543	539	544	534	531	512	514	524	526	525	533	551	575	533	556	549	551	544	544	539
Mean	531	529	528	526	527	529	528	522	516	505	501	*500*	504	512	521	525	529	535	535	536	*537*	532	534	534	524

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

115 ESKDALEMUIR (D) — 12° + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	13·1	14·4	13·1	13·5	13·6	15·3	22·1	12·6	17·6	21·5	24·1	21·9	29·7	26·8	25·6	24·0	20·9	15·1	15·0	15·1	9·7	14·3	10·6	10·6	*17·5*
2	10·5	19·9	9·7	11·5	14·0	15·5	14·2	12·5	12·0	13·8	15·3	19·2	21·3	22·0	20·5	19·1	16·8	14·7	13·0	16·9	16·9	16·8	16·7	16·3	15·8
3	16·2	16·2	16·1	18·8	15·3	14·3	13·7	12·5	12·4	13·3	16·0	18·6	20·7	20·6	20·5	18·7	17·8	17·7	17·6	17·2	16·5	16·1	15·9	15·9	16·6
4	15·9	15·8	15·3	15·2	15·4	15·2	13·5	11·6	10·6	12·6	15·1	18·7	22·1	24·0	21·6	20·4	18·8	18·2	17·9	17·2	16·7	16·2	16·0	16·0	16·7
5	16·0	15·9	15·9	15·6	15·5	15·5	15·1	13·6	13·3	13·5	15·5	19·4	19·7	19·9	19·6	18·7	17·6	21·4	21·2	17·8	11·5	6·8	9·9	14·6	16·0
6 d	15·7	15·9	16·2	16·0	12·8	13·2	12·9	13·6	13·4	16·6	17·8	19·9	23·3	21·5	21·1	23·6	21·6	6·5	13·1	17·8	17·8	17·0	16·7	16·8	16·7
7	18·7	12·8	11·4	17·7	17·0	17·5	15·8	15·2	13·3	14·2	15·3	17·5	20·2	21·4	21·1	20·4	19·4	17·9	17·0	17·0	16·9	16·4	11·8	7·0	16·4
8	7·0	13·1	10·0	12·4	13·3	14·6	14·9	15·2	14·4	15·9	18·6	16·9	24·2	26·3	23·2	21·0	18·5	17·1	16·9	16·6	16·4	16·1	16·0	16·4	16·5
9 q	17·0	16·7	17·6	17·0	14·2	14·1	13·3	11·7	10·1	12·3	14·8	18·0	20·4	21·5	20·5	18·8	17·5	16·3	16·5	16·7	16·5	16·4	16·2	16·0	16·3
10	16·1	16·5	16·9	16·9	15·3	14·9	13·3	11·5	9·9	12·2	15·3	18·8	22·5	22·9	21·8	20·2	18·3	16·8	16·4	16·7	17·0	16·7	16·3	16·2	16·6
11 d	15·9	15·8	15·2	13·9	13·6	12·9	10·3	9·1	8·6	10·6	16·0	23·0	29·3	26·4	28·5	25·8	18·5	18·2	15·1	14·6	10·5	13·3	13·3	7·1	16·1
12 d	8·8	11·7	20·2	12·2	11·5	14·2	13·5	11·8	12·7	13·4	17·1	19·6	22·3	22·4	21·3	18·3	11·8	15·1	18·6	17·1	11·9	13·9	9·7	7·7	14·9
13	9·8	14·0	15·2	14·8	15·8	15·8	14·3	16·1	17·8	16·3	17·0	20·5	21·6	22·1	22·3	20·3	18·9	18·7	18·6	17·7	14·2	12·1	13·2	15·0	16·8
14 d	14·2	13·9	23·9	17·7	13·6	12·4	13·6	10·8	10·6	12·4	16·1	19·1	22·7	23·3	22·4	20·8	17·5	13·7	13·9	10·8	14·0	14·1	9·8	11·7	15·5
15	16·1	20·1	14·5	13·2	12·8	12·9	15·6	15·4	11·0	12·4	15·9	19·8	23·2	24·4	23·8	23·1	19·3	17·8	16·1	15·6	13·1	12·5	14·2	15·3	16·6
16	15·8	16·0	17·2	15·8	15·0	14·1	12·9	11·7	11·6	12·6	15·5	19·0	22·1	23·5	22·3	21·1	19·7	17·1	17·0	16·0	14·7	16·0	15·9	16·7	16·6
17 q	17·6	14·3	15·7	14·8	13·1	14·2	13·4	12·3	11·9	13·7	15·8	17·7	19·4	20·6	20·6	19·5	18·3	17·7	17·2	16·5	16·7	16·1	15·9	16·0	16·2
18	15·9	15·7	16·0	16·2	15·2	12·5	12·3	12·0	12·4	13·8	16·0	19·4	21·9	22·3	21·7	19·7	18·3	17·3	16·6	16·5	16·5	16·6	15·2	16·3	16·5
19	13·1	14·2	10·3	8·9	8·1	8·0	9·0	10·1	11·6	13·8	16·1	19·6	21·6	22·2	21·5	19·6	18·9	18·0	17·7	17·2	16·9	12·4	5·4	11·3	*14·4*
20	14·3	19·2	16·7	11·9	11·7	12·0	14·0	16·0	14·3	14·7	17·3	20·3	23·4	24·1	23·1	20·0	17·8	16·0	15·3	15·3	15·7	15·3	15·3	15·8	16·6
21	16·4	16·2	15·5	14·2	14·2	14·0	13·1	12·5	11·7	12·6	14·5	16·8	19·3	20·6	20·1	18·9	18·4	17·1	16·5	16·8	16·8	16·8	15·2	12·2	15·9
22	13·3	15·2	15·1	14·5	13·6	13·4	12·4	11·3	11·3	13·4	16·5	19·7	22·2	22·7	21·0	19·2	18·3	17·1	14·9	14·1	4·9	9·3	13·4	15·2	15·1
23	16·0	16·0	15·4	16·9	14·3	12·8	11·6	11·9	12·3	14·7	17·0	20·7	23·7	22·6	22·3	23·3	21·7	17·0	16·7	16·1	15·7	15·4	13·1	10·7	16·6
24	16·4	21·9	17·9	9·7	10·8	11·5	12·4	14·2	13·4	15·3	17·6	20·1	22·3	22·3	20·5	20·4	19·4	17·3	7·0	9·7	12·4	14·3	14·7	15·1	15·7
25	16·0	16·2	19·0	16·2	13·3	13·2	12·6	13·4	16·1	14·9	16·1	18·4	21·2	22·0	20·4	17·6	16·2	15·4	15·2	15·3	15·5	15·9	15·9	15·3	16·3
26 q	15·7	15·9	15·6	15·3	14·8	14·1	12·4	11·6	11·6	14·2	16·8	19·8	21·5	21·4	20·1	16·9	15·7	14·9	14·9	15·5	15·9	16·0	16·4	16·1	16·0
27 q	16·1	16·0	17·1	16·9	13·9	12·9	12·4	11·6	11·4	11·7	13·4	16·5	19·6	21·6	21·4	19·6	18·1	16·6	15·8	15·9	16·1	16·0	16·1	16·2	16·0
28 q	16·1	16·1	16·1	16·0	15·2	14·2	13·0	11·9	11·5	12·0	14·2	17·1	21·3	21·1	20·0	19·1	17·7	16·3	15·0	15·3	16·0	16·0	16·3	16·5	16·0
29	16·5	17·0	16·1	15·2	14·2	13·1	12·0	11·2	11·2	13·6	15·8	18·0	20·5	22·1	23·7	21·7	22·3	20·5	18·4	18·1	17·8	16·9	16·8	15·9	17·0
30	16·0	16·1	15·4	15·7	14·9	13·5	13·6	13·6	12·5	14·0	15·8	17·8	19·1	21·6	21·4	20·9	20·0	19·3	16·2	16·2	17·0	16·8	12·3	15·3	16·5
Mean	14·9	16·0	15·7	14·8	13·9	13·7	13·4	12·6	*12·4*	13·9	16·3	19·1	22·1	*22·5*	21·8	20·4	18·5	16·8	16·0	16·0	14·9	14·9	14·1	14·2	16·2

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

116 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — APRIL 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1094	1093	1093	1100	1101	1089	1081	1084	1084	1092	1099	1111	1118	1171	1182	1178	1158	1145	1131	1129	1126	1099	1100	1101	1115
2	1100	1082	1050	1076	1095	1101	1105	1109	1110	1107	1101	1096	1105	1111	1117	1123	1134	1138	1136	1124	1118	1117	1113	1114	1108
3	1113	1113	1113	1109	1111	1111	1111	1110	1107	1107	1107	1102	1101	1105	1110	1111	1112	1111	1111	1111	1112	1112	1112	1112	1110
4	1112	1112	1111	1111	1111	1111	1112	1112	1112	1107	1101	1094	1093	1105	1129	1135	1130	1125	1117	1114	1113	1112	1112	1111	1113
5	1111	1111	1110	1111	1109	1108	1110	1111	1111	1110	1106	1105	1104	1107	1111	1116	1123	1130	1136	1135	1100	1110	1115	1112	1113
6 d	1112	1111	1110	1106	1106	1110	1113	1113	1115	1112	1112	1107	1102	1107	1113	1128	1137	1154	1137	1123	1114	1113	1113	1092	*1115*
7	1070	1082	1082	1078	1077	1082	1093	1098	1103	1104	1101	1098	1096	1101	1105	1107	1110	1112	1113	1113	1113	1106	1076	1081	1096
8	1063	1036	1052	1070	1086	1095	1100	1100	1101	1105	1101	1099	1100	1112	1121	1125	1129	1128	1118	1114	1114	1113	1112	1108	1100
9 q	1106	1106	1102	1101	1103	1107	1110	1111	1108	1102	1099	1094	1095	1100	1107	1108	1112	1113	1112	1110	1110	1111	1111	1111	1106
10	1110	1108	1107	1102	1105	1106	1106	1106	1104	1099	1093	1093	1097	1105	1111	1110	1111	1110	1108	1107	1107	1108	1110	1109	1105
11 d	1110	1110	1108	1106	1105	1103	1103	1100	1093	1087	1080	1077	1099	1135	1130	1149	1150	1140	1138	1131	1126	1107	1058	1078	1109
12 d	1045	1031	1042	1053	1071	1070	1076	1090	1096	1104	1097	1093	1094	1104	1111	1124	1140	1135	1124	1123	1107	1080	1092	1080	*1091*
13	1075	1090	1104	1107	1102	1087	1089	1093	1093	1094	1097	1100	1106	1105	1111	1117	1118	1118	1124	1126	1124	1118	1108	1102	1105
14 d	1094	1087	1076	1069	1090	1104	1106	1107	1107	1105	1099	1094	1094	1105	1111	1116	1123	1137	1145	1137	1119	1107	1081	1084	1104
15	1093	1080	1090	1091	1099	1102	1099	1088	1092	1089	1088	1092	1099	1106	1107	1112	1113	1116	1118	1118	1116	1113	1112	1111	1102
16	1109	1108	1108	1111	1112	1113	1112	1111	1107	1102	1095	1092	1093	1095	1104	1108	1112	1119	1118	1118	1117	1113	1111	1107	1108
17 q	1098	1099	1105	1106	1110	1110	1107	1108	1107	1105	1098	1095	1095	1101	1107	1108	1110	1111	1114	1114	1113	1112	1111	1108	1106
18	1107	1107	1106	1105	1104	1106	1106	1104	1100	1100	1098	1095	1094	1099	1104	1109	1111	1112	1115	1115	1114	1116	1113	1101	1106
19	1101	1101	1104	1104	1105	1099	1095	1093	1090	1087	1082	1082	1084	1088	1095	1099	1105	1110	1110	1108	1113	1122	1117	1101	1100
20	1096	1088	1070	1077	1092	1096	1099	1096	1094	1097	1098	1099	1107	1113	1126	1124	1118	1117	1113	1113	1112	1112	1111	1110	1103
21	1106	1105	1105	1106	1108	1111	1111	1107	1106	1105	1101	1099	1096	1099	1105	1108	1111	1112	1112	1111	1111	1110	1111	1110	1107
22	1103	1105	1107	1110	1112	1113	1113	1112	1108	1106	1104	1099	1095	1093	1096	1101	1106	1113	1121	1125	1124	1113	1110	1108	1108
23	1108	1106	1107	1106	1107	1110	1107	1106	1101	1099	1099	1098	1093	1094	1099	1105	1112	1122	1119	1114	1112	1114	1108	1103	1106
24	1098	1094	1073	1081	1088	1093	1094	1093	1093	1092	1085	1077	1083	1092	1101	1104	1109	1116	1129	1124	1117	1113	1111	1106	1099
25	1101	1096	1092	1090	1100	1101	1101	1102	1101	1096	1094	1087	1084	1092	1100	1108	1111	1112	1111	1108	1110	1111	1108	1109	1101
26 q	1108	1110	1111	1110	1108	1107	1108	1106	1101	1097	1093	1088	1088	1099	1108	1113	1112	1113	1111	1108	1107	1107	1107	1107	1105
27 q	1107	1107	1106	1104	1107	1107	1107	1106	1105	1101	1097	1093	1093	1095	1099	1102	1106	1110	1110	1107	1106	1107	1107	1107	1104
28 q	1107	1107	1107	1107	1110	1110	1110	1108	1105	1106	1102	1094	1089	1099	1102	1105	1105	1103	1111	1108	1106	1106	1106	1106	1105
29	1106	1105	1105	1107	1108	1107	1104	1101	1100	1095	1092	1087	1083	1090	1099	1106	1108	1111	1111	1107	1105	1106	1105	1105	1102
30	1106	1106	1107	1107	1107	1106	1104	1099	1098	1093	1093	1089	1089	1092	1094	1099	1103	1116	1129	1123	1117	1112	1111	1107	1104
Mean	1099	1097	1095	1097	1102	1103	1103	1103	1102	1100	1097	*1094*	1096	1104	1111	1115	1118	*1120*	1120	1117	1113	1110	1106	1103	1105

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

117 ESKDALEMUIR — APRIL 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1 d	5 1	551	*364*	11 0	187	12 55	*36·6*	2·5	20 30	*34·1*	15 2	*1190*	1078	6 23	112	2,3,4,5,4,4,3,4	29	2	82·1
2	18 13	536	473	12 50	63	1 41	28·6	8·8	2 20	19·8	17 50	1142	1039	2 10	103	4,3,2,1,2,3,3,0	18	1	82·1
3	21 9	531	498	11 0	*33*	12 41	21·4	11·9	8 9	9·5	3 4	1116	1100	12 0	*16*	1,2,1,1,1,1,0,0	7	0	82·1
4	14 33	544	472	10 13	72	13 26	25·2	10·0	8 20	15·2	15 0	1137	1090	12 10	47	0,0,1,0,3,2,0,1	7	1	82·1
5	20 16	593	388	20 49	*205*	20 43	29·1	-2·9	20 15	32·0	20 5	1143	1059	20 41	84	1,0,1,3,1,3,6,4	19	1	82·1
6 d	17 34	606	473	9 35	133	12 45	25·8	-2·0	17 27	27·8	17 19	1160	1081	24 0	79	2,2,3,3,3,5,3,2	23	1	82·1
7	22 29	602	481	11 39	121	12 57	22·5	3·5	23 21	19·0	19 24	1116	1065	0 30	51	3,3,3,2,2,2,1,4	20	1	82·1
8	15 32	554	473	9 23	81	13 28	27·8	4·1	0 52	23·7	16 51	1132	1028	1 32	104	4,3,3,3,3,3,1,2	22	1	82·1
9 q	19 43	540	489	10 49	51	13 47	22·1	9·7	8 14	12·4	17 40	1114	1093	11 50	21	1,1,0,0,1,1,1,0	5	0	82·1
10	23 38	549	492	13 32	57	13 0	23·4	9·7	8 35	13·7	14 25	1113	1092	11 0	21	1,1,0,1,2,1,0,1	7	0	82·1
11 d	14 49	579	448	13 5	131	12 50	34·1	3·6	23 32	30·5	16 1	1154	1045	22 23	109	1,1,2,4,5,3,3,4	23	1	82·1
12 d	20 40	*618*	439	1 50	179	12 58	23·2	3·0	23 22	20·2	16 45	1142	*1021*	1 57	*121*	4,3,3,2,2,4,4,4	26	1	82·1
13	23 56	555	481	11 38	74	14 3	22·9	8·8	0 15) 21 18)	14·1	19 4	1130	1071	0 18	59	3,2,3,2,2,2,2,3	19	1	82·1
14 d	20 3	579	477	22 22	102	2 41	31·8	2·5	19 57	29·3	18 12	1148	1053	3 3	95	4,3,2,3,3,3,4,4	26	1	82·0
15	21 16	550	458	11 40	92	13 28	25·3	9·9	8 24) 21 8)	15·4	18 30	1119	1075	1 35	44	3,2,2,3,2,2,2,2	18	1	82·0
16	16 33	546	492	11 10	54	13 44	24·0	11·3	8 22	12·7	17 24	1120	1089	11 39	31	1,1,2,1,1,2,2,2	12	0	82·1
17 q	19 27	541	492	11 40	49	14 1	20·9	11·6	8 33	*9·3*	18 39	1116	1093	12 0	23	2,1,1,1,1,2,1,0	9	0	82·1
18	23 9	555	489	11 23	66	13 38	22·6	11·6	7 22	11·0	21 38	1117	1093	12 11	24	0,2,2,2,1,0,0,2	9	0	82·1
19	19 55	577	493	12 32	84	12 57	24·0	1·9	22 40	22·1	21 40	1124	1081	10 51	43	2,2,1,2,3,2,3,4	19	1	82·1
20	1 58	563	478	14 45	85	13 54	26·1	9·7	3 31	16·4	14 47	1129	1066	2 12	63	3,2,2,3,3,3,2,0	18	1	82·2
21	18 21	548	501	11 39	47	13 40	21·4	11·3	9 2	10·1	23 15	1113	1095	12 40	18	1,0,1,1,2,1,1,2	9	0	82·1
22	20 37	565	497	12 6	68	13 16	23·3	-1·9	20 27	25·2	19 40	1130	1092	13 20	38	2,0,1,2,2,3,4,3	17	1	82·1
23	15 32	581	478	17 20	103	12 49	24·7	4·3	22 59	20·4	17 43	1125	1089	12 50	36	1,2,2,3,3,5,3,3	22	1	82·1
24	18 53	594	497	7 50	97	1 31	25·2	1·9	18 33	23·3	18 42	1132	1070	2 40	62	3,2,3,3,2,3,4,2	22	1	82·1
25	22 8	550	510	11 16	40	13 36	22·3	12·4	6 28	9·9	17 10	1113	1082	12 0	31	2,2,2,2,2,2,1,2	15	0	82·1
26 q	14 14	551	513	10 12	38	13 4	23·1	11·5	8 10	11·6	15 23	1115	1087	12 0	28	0,0,0,2,2,2,1,0	7	0	82·1
27 q	21 15	551	511	10 2	40	13 45	22·3	10·6	8 55	11·7	18 0	1112	1089	12 11	23	2,2,0,1,1,1,1,1	9	0	82·1
28 q	22 30	552	505	10 1	47	12 43	22·2	10·6	8 20	11·6	18 20	1112	1087	12 31	25	0,0,0,1,1,1,1,1	5	0	82·2
29	20 10	571	505	13 26	66	14 16	24·2	10·6	8 2	13·6	17 49	1113	1082	12 22	31	1,1,1,1,3,2,3,1	13	0	82·2
30	17 10	582	495	10 41	87	14 9	22·3	9·7	22 21	12·6	18 50	1132	1087	12 30	45	1,1,2,3,2,4,3,2	18	1	82·3
Mean	- -	564	479	- -	85	- -	24·9	7·0	- -	17·9	- -	1129	1076	- -	53	-	15·8	0·63	82·1

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

118 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	547	536	542	533	525	528	527	529	520	509	523	517	520	523	528	540	544	551	556	560	551	540	541	540	535
2 d	540	555	540	535	563	534	525	521	504	501	504	511	519	508	532	543	538	542	545	542	543	541	540	536	532
3	540	547	525	531	519	527	532	533	524	504	497	508	517	524	520	536	579	537	545	540	543	548	533	531	531
4	537	531	534	534	535	531	524	524	516	522	518	515	510	510	519	531	540	549	545	550	544	542	559	537	532
5 q	535	535	532	532	535	536	532	535	522	523	521	528	526	534	543	526	535	546	543	539	540	542	534	535	534
6	536	533	529	531	534	535	535	533	531	524	517	519	520	528	548	548	555	552	536	543	538	537	537	537	535
7 q	537	536	535	535	536	534	531	528	525	524	523	523	524	528	539	540	545	546	551	553	552	546	535	542	536
8 q	543	539	534	535	537	533	528	524	524	521	522	524	525	521	525	533	537	543	548	555	548	547	544	543	535
9	542	544	541	539	538	537	531	528	531	532	533	536	548	539	543	560	524	575	567	560	539	551	524	520	541
10	522	523	528	529	530	525	526	524	520	516	515	516	532	551	548	551	555	565	569	556	553	575	551	531	538
11 d	534	531	531	530	525	531	541	539	530	496	489	492	497	505	521	524	551	546	539	535	536	520	523	526	525
12 d	531	535	510	511	511	519	510	504	504	504	504	499	504	510	526	540	551	558	555	542	534	523	516	525	*522*
13	528	528	528	527	528	524	516	517	521	517	517	514	523	521	526	524	544	571	563	554	540	535	537	528	530
14	535	528	532	531	531	531	527	524	525	516	504	504	504	516	543	532	548	555	548	547	546	532	534	537	530
15 q	532	531	529	528	531	531	526	520	516	508	501	500	504	516	532	536	543	546	544	544	541	544	547	534	529
16	536	531	543	537	530	535	531	528	522	515	508	516	522	525	531	536	544	555	545	555	551	543	541	542	534
17	532	528	529	533	532	536	537	539	528	512	513	524	524	528	526	540	548	559	567	551	546	547	536	551	536
18	559	537	534	538	537	540	541	542	541	528	522	516	521	521	512	537	543	567	568	551	554	555	562	548	541
19	533	535	541	544	542	541	535	527	522	521	515	508	516	522	537	535	542	556	567	560	550	546	547	555	537
20	533	539	539	540	531	523	523	522	515	504	508	499	505	508	524	543	535	554	555	558	551	550	548	548	531
21	545	544	546	544	544	540	528	520	512	511	512	523	531	544	579	547	549	551	548	547	546	548	541	540	539
22 q	540	537	540	541	543	539	533	525	516	508	497	508	520	531	542	536	550	555	551	540	541	542	546	544	534
23	551	553	553	553	555	543	517	535	528	509	489	501	510	512	520	535	537	544	551	552	555	549	548	545	535
24	550	543	548	542	540	544	531	512	497	507	511	514	520	524	532	521	537	542	544	544	539	544	544	545	532
25 d	544	544	551	551	543	552	529	523	519	504	495	496	509	525	544	547	555	561	555	567	569	560	547	551	539
26	556	546	547	544	547	544	540	528	514	505	502	504	512	524	536	548	547	554	565	559	556	556	551	551	539
27	548	542	542	540	535	529	523	520	516	512	512	516	523	529	524	546	579	569	570	571	562	551	548	550	540
28	548	544	541	541	537	534	522	512	504	504	500	502	509	528	548	552	568	544	564	567	566	560	557	556	538
29	559	559	536	548	548	541	535	530	519	508	510	512	526	539	547	555	559	574	563	551	551	548	550	541	*542*
30 d	549	531	542	537	540	539	537	517	508	505	511	510	516	533	517	531	562	560	556	571	569	560	551	548	537
31	539	544	539	536	542	536	531	508	499	508	516	509	528	523	544	547	530	563	554	551	544	543	541	541	534
Mean	541	538	537	537	536	535	529	525	519	512	*510*	512	518	524	534	539	547	*555*	554	552	548	546	542	541	535

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

119 ESKDALEMUIR (D) — 12° + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	19·0	20·1	14·7	12·9	12·8	12·5	12·3	12·2	12·5	13·7	17·1	20·4	22·9	23·9	22·4	20·5	18·7	17·7	17·0	15·6	12·6	15·1	16·1	16·1	*16·6*
2 d	16·0	16·0	16·0	18·4	18·4	12·7	11·1	11·8	13·1	14·2	17·4	17·9	20·4	20·0	18·9	18·3	17·8	17·7	17·0	16·7	16·6	16·8	16·1	16·0	16·5
3	17·7	15·9	11·3	12·6	12·9	12·2	12·3	12·3	12·5	15·7	17·8	19·2	19·7	20·9	20·0	18·7	18·2	17·0	16·7	16·7	15·1	16·4	14·3	13·7	15·8
4	15·7	15·3	15·1	14·1	12·2	11·5	11·5	11·9	12·4	14·2	15·1	16·6	17·9	18·8	19·5	18·9	18·2	17·5	16·9	13·9	13·5	15·0	16·2	16·0	15·3
5 q	15·2	15·7	15·3	15·8	13·5	13·9	14·9	14·3	13·3	14·2	15·7	18·7	18·3	20·9	21·2	18·6	18·0	17·4	16·1	15·5	15·9	13·3	15·1	15·5	16·1
6	15·7	15·1	15·1	15·0	14·3	14·0	12·7	12·7	13·3	15·1	16·1	17·8	19·0	18·2	17·3	16·8	16·9	15·8	16·0	16·6	16·5	16·8	16·7	16·4	15·8
7 q	16·0	15·3	15·1	14·4	13·7	11·9	11·6	11·9	12·8	14·8	15·7	16·5	17·9	18·6	18·9	18·3	17·9	17·1	17·0	15·5	15·9	16·0	12·2	12·4	15·3
8 q	11·7	11·0	11·3	11·1	9·9	9·4	9·7	9·7	12·1	13·8	16·5	19·4	20·8	19·7	19·3	18·8	18·8	18·7	17·2	16·3	16·0	16·1	15·8	15·6	14·9
9	15·4	14·9	13·7	13·0	13·3	12·4	13·0	13·5	13·6	16·5	18·5	20·2	22·1	21·7	21·3	21·9	18·3	19·7	18·1	12·5	11·8	6·1	9·9	13·1	15·6
10	11·7	11·9	11·1	9·7	11·3	12·5	11·3	12·4	13·3	15·2	17·6	20·5	22·3	24·0	23·7	23·1	22·2	20·8	19·9	15·8	14·5	1·6	5·2	9·7	15·1
11 d	12·5	12·5	11·2	11·9	11·4	16·0	15·8	11·4	10·3	13·1	16·1	19·9	23·2	25·5	27·7	26·1	23·0	17·4	16·0	13·7	9·0	11·5	14·5	15·3	16·0
12 d	15·0	11·0	8·2	13·3	16·0	10·6	9·7	9·7	10·1	11·9	15·0	18·7	21·9	23·0	22·3	20·4	19·3	17·8	15·5	13·5	7·9	7·0	11·3	12·2	*14·2*
13	10·8	11·4	12·4	12·2	12·5	11·5	10·1	9·4	9·9	12·4	15·8	19·7	22·4	22·6	21·3	20·1	19·1	13·7	16·0	15·1	13·6	14·2	11·6	13·9	14·7
14	13·5	12·6	12·8	12·6	13·5	13·1	12·1	11·6	11·8	13·0	16·3	20·2	21·9	22·4	20·8	23·2	18·5	19·2	17·1	16·3	15·6	13·1	13·2	17·2	15·9
15 q	14·3	14·2	14·3	14·3	14·2	12·6	11·3	10·9	10·9	11·5	13·4	16·6	19·6	21·0	21·3	19·5	17·2	15·3	15·0	15·7	15·5	15·6	13·3	13·6	15·0
16	14·3	13·3	15·1	11·3	11·5	11·4	10·7	9·8	10·0	11·6	15·1	18·7	20·8	21·8	21·9	20·1	18·5	17·8	17·0	16·9	16·7	15·9	15·5	12·5	15·3
17	12·3	9·1	11·5	10·0	11·5	10·5	10·8	11·1	12·6	15·7	18·5	21·0	22·3	23·2	23·4	22·3	20·6	18·7	15·7	16·3	15·3	15·0	15·0	15·8	15·8
18	13·3	12·4	12·3	11·5	11·1	10·8	11·9	11·8	12·4	14·3	16·2	19·0	22·3	25·0	24·2	23·2	23·0	20·1	19·0	15·8	15·9	16·2	10·6	9·7	15·9
19	12·6	14·4	15·1	14·1	13·9	12·7	11·4	11·3	10·8	11·8	14·4	18·6	19·7	19·0	20·5	20·5	19·5	19·1	17·2	15·5	13·6	12·5	14·1	16·0	15·3
20	13·4	13·4	13·7	12·9	14·2	14·7	18·8	15·8	14·1	12·8	13·9	16·9	19·9	20·9	20·7	20·6	17·2	17·7	16·9	16·5	16·2	16·0	15·9	15·7	16·2
21	14·4	16·1	15·2	14·0	12·6	11·5	10·8	10·1	10·6	14·1	14·9	18·5	22·5	24·3	26·5	24·2	20·5	17·5	15·6	15·2	16·4	16·6	16·0	16·2	16·4
22 q	15·8	14·7	15·1	14·3	13·8	12·4	11·9	11·5	11·9	13·3	15·6	19·6	22·9	23·2	21·1	18·5	16·8	14·8	14·0	14·0	15·4	15·9	16·0	16·7	15·8
23	17·8	16·1	14·9	12·9	12·5	10·8	12·5	15·1	12·2	12·7	17·1	20·6	21·9	22·2	21·4	19·7	17·8	15·1	14·1	14·3	15·1	15·6	15·7	15·9	16·0
24	17·3	18·0	15·9	15·4	17·6	13·2	9·4	9·1	11·5	15·0	17·7	21·2	24·2	25·3	23·8	20·9	17·7	15·2	13·7	14·0	13·5	15·2	15·3	16·0	16·5
25 d	15·8	15·8	17·3	25·6	14·1	15·1	9·7	6·9	7·6	10·6	15·7	20·4	23·8	25·8	24·8	22·8	19·7	17·3	15·1	15·6	10·8	11·7	14·3	15·8	16·3
26	15·7	13·0	13·7	12·2	11·0	9·0	8·3	9·2	9·7	11·9	14·4	18·0	21·0	22·5	22·1	21·3	20·2	18·8	17·8	16·8	16·8	16·8	15·2	15·2	15·4
27	14·6	14·4	14·6	14·1	12·9	11·6	9·8	10·1	10·6	12·2	16·4	19·4	22·0	23·1	20·2	18·9	20·2	19·5	19·5	18·9	18·5	16·5	16·0	15·1	16·2
28	15·2	14·6	14·1	14·2	12·6	11·9	11·7	12·1	12·3	14·8	17·3	18·6	19·6	22·4	22·9	20·7	19·4	18·3	17·8	18·2	18·7	17·0	16·2	16·4	16·5
29	17·1	14·0	8·0	10·7	11·5	11·5	11·5	10·2	10·6	11·6	13·5	17·7	19·9	21·2	21·4	20·5	19·2	17·7	12·2	15·7	16·2	16·1	16·2	12·4	14·9
30 d	10·6	12·3	12·5	12·5	12·8	10·2	9·3	9·5	11·4	13·2	16·0	19·9	22·0	23·0	23·3	22·7	22·3	20·8	18·0	17·5	17·2	7·9	8·4	11·8	15·2
31	15·9	11·5	12·2	13·9	13·7	13·5	14·2	13·5	16·0	15·1	15·1	16·0	18·4	20·5	21·2	21·0	19·4	16·9	17·9	17·3	16·7	16·1	15·5	15·2	16·1
Mean	14·7	14·1	13·5	13·6	13·1	12·2	11·7	*11·4*	11·8	13·5	16·0	18·9	21·1	*22·1*	21·8	20·7	19·2	17·7	16·5	15·7	14·9	14·1	14·1	14·6	15·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

120 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — MAY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1099	1077	1064	1080	1099	1101	1100	1098	1100	1098	1090	1086	1084	1093	1101	1105	1110	1112	1112	1118	1112	1111	1108	1107	1099
2 d	1105	1089	1086	1069	1059	1071	1086	1089	1093	1094	1089	1087	1087	1095	1101	1107	1112	1113	1113	1112	1111	1109	1108	1108	*1096*
3	1104	1079	1082	1090	1099	1099	1100	1101	1099	1098	1093	1090	1094	1101	1107	1110	1116	1125	1120	1120	1117	1111	1110	1098	1103
4	1100	1102	1105	1108	1106	1107	1106	1102	1100	1092	1089	1092	1093	1099	1106	1107	1108	1111	1111	1114	1113	1108	1100	1099	1103
5 q	1104	1104	1106	1106	1107	1107	1107	1107	1108	1100	1095	1094	1099	1105	1114	1117	1116	1113	1113	1112	1112	1112	1111	1110	1107
6	1108	1107	1108	1111	1111	1111	1111	1109	1107	1106	1105	1100	1100	1102	1108	1116	1123	1132	1134	1123	1116	1111	1111	1109	1112
7 q	1109	1109	1110	1111	1112	1111	1109	1105	1101	1098	1099	1099	1100	1101	1101	1102	1105	1108	1110	1112	1111	1112	1114	1109	1107
8 q	1100	1099	1099	1096	1099	1100	1101	1100	1093	1089	1089	1088	1089	1093	1093	1098	1101	1105	1106	1108	1110	1111	1110	1108	1099
9	1107	1107	1106	1106	1105	1102	1100	1098	1091	1084	1082	1078	1075	1082	1087	1092	1105	1102	1113	1124	1124	1110	1099	1100	1099
10	1104	1105	1104	1102	1101	1101	1101	1099	1096	1095	1093	1091	1088	1088	1093	1100	1113	1123	1136	1142	1135	1113	1084	1089	1104
11 d	1098	1101	1105	1107	1107	1096	1079	1083	1089	1088	1088	1093	1098	1111	1126	1146	1160	1160	1147	1142	1127	1117	1114	1113	*1112*
12 d	1108	1094	1084	1079	1080	1087	1092	1093	1093	1099	1099	1101	1106	1111	1113	1120	1125	1132	1138	1142	1137	1126	1118	1114	1108
13	1110	1108	1106	1105	1107	1107	1106	1106	1100	1100	1097	1094	1094	1098	1105	1112	1119	1128	1130	1130	1126	1120	1114	1112	1110
14	1102	1108	1108	1108	1107	1106	1106	1104	1100	1096	1089	1087	1091	1099	1113	1125	1137	1131	1128	1120	1117	1118	1114	1101	1109
15 q	1100	1106	1108	1108	1110	1111	1111	1111	1108	1100	1095	1093	1090	1096	1102	1111	1114	1118	1117	1113	1112	1111	1108	1107	1107
16	1105	1105	1101	1099	1107	1107	1109	1111	1108	1105	1099	1090	1092	1098	1100	1101	1105	1112	1112	1111	1112	1113	1113	1111	1105
17	1099	1100	1103	1101	1100	1096	1094	1093	1092	1087	1081	1076	1082	1092	1100	1107	1112	1119	1125	1123	1118	1114	1112	1107	1101
18	1089	1092	1098	1100	1102	1101	1095	1093	1090	1089	1088	1092	1095	1097	1102	1111	1125	1123	1115	1113	1111	1106	1101	1090	1101
19	1095	1100	1102	1104	1106	1106	1107	1105	1101	1099	1093	1088	1090	1094	1102	1108	1118	1123	1129	1129	1124	1116	1109	1093	1106
20	1093	1100	1105	1106	1105	1101	1099	1099	1099	1100	1100	1096	1092	1094	1094	1105	1118	1119	1118	1114	1114	1111	1111	1108	1104
21	1107	1106	1104	1107	1108	1108	1108	1107	1105	1101	1093	1084	1081	1087	1095	1112	1119	1123	1122	1117	1111	1111	1111	1109	1106
22 q	1108	1110	1111	1112	1113	1113	1110	1107	1108	1105	1095	1086	1080	1090	1099	1107	1115	1120	1120	1117	1113	1110	1107	1106	1107
23	1101	1100	1102	1105	1105	1106	1108	1094	1093	1084	1078	1077	1075	1080	1088	1099	1109	1116	1117	1113	1111	1110	1107	1107	1099
24	1106	1102	1096	1100	1095	1088	1098	1104	1104	1100	1094	1088	1093	1101	1106	1116	1120	1122	1120	1115	1113	1112	1111	1108	1105
25 d	1108	1108	1107	1090	1084	1093	1102	1107	1105	1100	1095	1093	1092	1100	1107	1113	1119	1120	1126	1123	1123	1116	1112	1109	1106
26	1106	1109	1111	1112	1112	1112	1111	1111	1111	1107	1101	1096	1095	1101	1101	1104	1107	1110	1109	1111	1111	1111	1111	1111	1108
27	1111	1111	1111	1111	1112	1112	1111	1112	1110	1104	1098	1090	1091	1099	1106	1107	1107	1112	1112	1110	1108	1111	1108	1108	1107
28	1108	1108	1108	1108	1110	1111	1110	1106	1105	1099	1094	1090	1089	1093	1093	1100	1110	1117	1113	1112	1111	1110	1107	1106	1105
29	1105	1089	1099	1101	1106	1107	1105	1106	1106	1105	1099	1090	1093	1095	1102	1108	1112	1118	1130	1120	1114	1111	1110	1108	1106
30 d	1097	1099	1100	1104	1107	1111	1108	1105	1100	1094	1089	1083	1082	1089	1101	1102	1106	1118	1123	1121	1119	1117	1100	1092	1103
31	1079	1088	1100	1106	1107	1110	1112	1117	1112	1105	1099	1094	1094	1105	1107	1114	1118	1119	1117	1111	1111	1110	1108	1108	1106
Mean	1102	1101	1101	1102	1103	1103	1103	1103	1101	1097	1093	*1090*	1091	1096	1102	1109	1116	1119	*1121*	1119	1116	1113	1108	1105	1105

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

121 ESKDALEMUIR — MAY 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1	20 20	575	491	11 35	84	13 12	24·9	7·1	20 10	17·8	19 44	1123	1060	2 20	63	3,3,2,2,2,2,3,1	18	1	82·3
2 d	1 11	575	492	9 22	83	3 46	22·3	9·7	7 35	12·6	17 28	1116	*1057*	4 7	59	3,3,2,2,3,3,1,1	18	1	82·3
3	16 51	603	484	10 20	119	0 58	26·5	8·8	2 15	17·7	17 18	1128	1076	2 0	52	4,2,2,2,3,4,3,3	23	1	82·4
4	22 22	575	508	13 30	67	14 28	19·6	9·7	6 9	9·9	19 56	1117	1088	10 10	29	1,1,2,2,1,1,2,3	13	0	82·4
5 q	14 28	552	512	12 22	40	14 8	22·2	11·7	21 28	10·5	15 11	1118	1093	11 11	25	1,2,2,1,3,2,1,2	14	0	82·4
6	17 53	580	513	11 27	67	12 42	19·6	12·3	6 50	*7·3*	18 10	1137	1099	11 40	38	0,1,2,1,2,3,3,1	13	0	82·4
7 q	19 49	559	521	11 21	*38*	14 48	19·5	10·5	22 41	9·0	22 36	1117	1096	9 30	21	0,0,2,2,1,1,2,2	10	0	82·5
8 q	19 5	560	516	13 40	44	12 32	21·4	9·1	4 16	12·3	20 27	1111	1087	11 42	24	1,1,2,1,2,1,1,1	10	0	82·5
9	17 44	579	498	16 16	81	13 20	23·9	-1·1	21 15	25·0	20 28	1128	1072	12 39	56	1,2,2,2,3,4,3,4	21	1	82·5
10	21 29	604	509	11 22	95	14 0	25·2	*-3·8*	21 56	*29·0*	19 53	1143	1081	22 40	62	1,2,2,1,3,2,3,4	18	1	82·6
11 d	16 7	575	*473*	9 48	102	14 2	28·6	4·5	20 36	24·1	16 21	*1166*	1076	6 33	*90*	1,3,3,3,3,4,4,3	24	1	82·6
12 d	17 29	569	496	9 13	73	13 14	23·3	1·5	20 59	21·8	19 32	1144	1076	3 45	68	3,3,2,2,2,2,4,3	21	1	82·7
13	17 58	586	505	15 20	81	12 45	23·2	8·4	22 47	14·8	18 39	1131	1093	12 30	38	2,1,2,1,2,3,3,3	17	1	82·7
14	16 35	569	495	12 32	74	14 22	26·1	11·4	7 30	14·7	16 22	1138	1084	11 18	54	2,2,2,1,3,3,1,2	16	1	82·7
15 q	22 11	559	497	11 10	62	14 14	21·9	10·4	7 37	11·5	17 25	1119	1089	12 31	30	1,1,1,1,1,1,0,2	8	0	82·7
16	17 9	573	504	10 9	69	13 24	22·4	8·9	7 6	13·5	22 59	1116	1088	11 55	28	2,2,1,1,2,3,2,3	16	0	82·7
17	18 31	572	508	9 52	64	13 36	24·1	8·8	1 37	15·3	18 20	1128	1075	11 31	53	2,2,2,2,3,2,2,3	18	0	82·7
18	22 46	587	497	14 5	90	16 6	25·9	5·3	22 50	20·6	16 53	1129	1087	10 10	42	3,2,2,1,3,3,3,3	20	1	82·7
19	17 51	586	504	11 15	82	14 47	21·9	8·9	21 53	13·0	18 50	1131	1084	23 59	47	2,2,1,2,3,3,3,3	19	1	82·7
20	19 32	564	493	11 48	71	15 13	21·4	11·5	3 32	9·9	17 0	1120	1085	0 1	35	2,3,3,2,2,3,2,1	18	0	82·7
21	14 32	599	508	9 43	91	14 30	27·3	8·7	7 54	18·6	17 29	1125	1077	12 2	48	1,1,1,2,4,4,2,1	16	1	82·7
22 q	17 45	563	490	10 14	73	13 2	24·1	10·6	6 40	13·5	17 39	1122	1079	12 27	43	1,1,1,2,2,2,2,1	12	0	82·8
23	20 37	567	482	11 10	85	13 39	22·5	8·9	5 54	13·6	17 55	1118	1072	12 22	46	2,3,3,2,2,2,2,1	17	1	82·8
24	19 42	571	492	8 17	79	13 21	26·0	7·1	6 21	18·9	16 52	1123	1083	5 0	40	2,2,2,2,3,2,3,1	17	1	82·8
25 d	19 57	594	485	10 45	109	3 29	*31·3*	6·1	7 16	25·2	18 42	1129	1071	3 56	58	2,4,2,2,3,3,3,2	21	1	82·9
26	18 45	599	500	10 36	99	13 23	23·3	7·8	6 39	15·5	19 55	1113	1094	12 8	*19*	2,0,1,1,2,3,3,2	14	0	82·9
27	17 0	599	508	14 22	91	13 52	24·4	8·7	6 18	15·7	17 21	1113	1088	11 48	25	1,1,1,1,3,3,3,3	16	1	82·7
28	16 29	589	488	10 48	101	14 8	23·8	11·1	5 55	12·7	17 30	1119	1088	12 0	31	0,1,1,2,2,3,2,2	13	0	82·8
29	17 20	582	505	9 24	77	14 16	22·2	6·0	2 20	16·2	18 28	1131	1086	1 30	45	4,2,1,1,1,2,2,2	15	0	82·8
30 d	17 34	*626*	492	14 31	*134*	14 15	24·9	2·6	21 40	22·3	18 15	1124	1077	12 39	47	3,2,2,2,3,5,3,3	23	1	82·8
31	17 41	571	492	7 58	79	14 43	22·2	10·8	1 43	11·4	17 10	1120	1075	0 59	45	3,2,2,3,3,3,1,1	18	1	82·8
Mean	- -	580	499	- -	81	- -	23·7	7·8	- -	15·9	- -	1126	1082	- -	44	-	16·7	0·58	82·6

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

122 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	541	540	539	538	541	536	524	519	513	509	508	504	508	524	532	539	548	555	568	567	557	548	546	544	535
2 q	541	540	540	541	541	539	531	524	512	501	501	512	520	526	533	541	548	555	556	555	556	551	548	542	536
3 q	536	535	532	529	537	543	536	536	528	525	515	511	524	525	525	529	537	543	552	548	548	546	543	543	534
4	543	540	540	541	544	541	536	535	530	521	508	508	521	541	540	548	551	550	553	559	557	550	545	544	539
5	544	544	541	547	547	543	543	540	531	525	516	523	524	534	540	549	562	566	572	563	566	564	560	563	546
6 d	555	555	559	562	565	565	558	524	524	519	485	485	528	536	521	548	535	571	568	556	550	537	539	542	541
7 d	555	541	531	510	531	528	519	497	509	506	503	512	511	524	537	551	544	575	580	571	551	546	533	535	533
8 d	541	533	547	543	535	514	509	513	516	508	504	505	516	528	547	559	552	550	568	555	557	555	544	551	535
9	533	536	528	531	533	524	508	496	504	501	503	507	508	517	519	540	559	559	563	575	553	551	556	541	*531*
10 d	536	524	528	529	532	515	524	531	521	508	495	488	508	513	528	528	540	563	573	566	555	548	552	544	531
11	541	530	536	544	540	536	524	512	496	492	490	492	502	512	537	542	557	563	570	571	567	550	547	540	533
12	534	533	536	537	540	536	535	525	521	515	504	504	504	515	529	533	547	548	559	556	556	548	546	543	533
13	537	536	537	541	540	532	531	530	527	516	508	520	524	526	528	528	543	551	555	550	551	555	549	546	536
14	541	540	544	541	544	547	551	552	548	535	520	511	510	515	523	532	541	555	570	577	568	551	547	544	542
15	544	539	532	540	540	540	539	538	536	528	520	514	502	516	528	535	543	548	555	559	557	552	545	543	537
16	539	537	539	540	542	541	540	543	542	532	525	518	520	525	528	547	557	560	562	555	556	550	544	548	541
17	538	543	532	528	539	543	547	549	548	532	521	517	519	525	532	560	520	549	559	559	556	555	553	552	541
18	551	545	548	547	547	546	539	531	526	521	516	524	531	539	548	555	548	556	553	555	555	548	551	548	543
19	548	540	540	540	542	540	532	524	516	517	521	526	529	536	541	551	551	554	568	571	569	554	541	543	541
20	551	544	536	544	544	543	533	530	524	516	505	521	524	531	544	544	546	548	548	555	551	551	547	547	539
21	545	539	539	539	537	540	537	530	524	520	519	528	532	535	532	543	544	548	559	560	555	551	553	548	540
22 q	542	539	537	537	540	537	534	532	531	526	516	520	534	545	544	532	536	544	549	553	552	549	550	550	539
23	551	551	551	548	548	546	542	540	528	520	531	524	537	537	544	549	551	546	548	555	550	548	548	547	543
24	547	544	543	543	544	539	537	538	537	535	530	528	531	533	531	534	540	547	551	554	551	536	532	532	539
25	543	528	522	531	537	538	537	532	524	517	515	512	515	523	531	532	537	539	547	549	549	550	548	544	533
26	542	547	549	548	544	544	535	533	532	534	528	525	526	536	537	550	555	556	560	560	560	553	553	554	544
27	556	553	556	551	557	550	548	548	532	506	524	528	524	521	531	548	551	552	551	552	556	551	549	545	543
28	544	542	540	543	545	547	541	538	535	524	520	523	526	532	534	547	533	548	556	556	547	544	546	552	540
29 q	546	537	540	541	544	540	535	533	528	524	516	508	504	522	535	536	544	548	551	551	553	550	549	544	537
30 d	543	540	540	548	555	553	551	556	553	548	532	527	524	531	555	572	573	532	555	564	561	563	563	555	*550*
Mean	544	540	539	540	543	539	535	531	527	519	*513*	514	519	527	535	543	546	553	*559*	559	556	550	548	546	539

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

123 ESKDALEMUIR (D) — 12° + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	14·3	14·2	13·9	13·7	12·1	11·6	11·5	10·8	11·6	13·2	15·2	17·2	18·0	19·0	18·9	17·9	18·0	18·0	16·2	16·0	16·0	16·1	15·9	15·1	15·2
2 q	14·3	14·2	13·8	13·3	12·4	11·5	10·9	11·8	12·3	13·1	15·1	17·7	18·5	18·6	18·9	18·7	18·1	17·8	17·9	17·7	17·0	16·3	15·1	15·3	15·4
3 q	15·7	14·0	14·7	16·0	15·5	14·3	12·0	10·9	10·6	11·9	14·2	17·8	20·1	19·1	18·0	17·7	17·0	16·1	15·9	15·7	15·2	15·4	15·7	15·1	15·4
4	14·2	14·1	13·7	13·6	12·8	11·4	11·1	11·6	11·9	13·1	14·4	17·7	21·1	22·9	22·0	20·7	18·8	16·9	16·2	16·1	15·3	15·1	15·1	15·1	15·6
5	15·6	15·3	14·5	15·0	12·8	11·7	11·2	9·8	8·9	11·5	13·8	15·8	18·0	19·7	19·8	18·3	17·2	16·9	16·6	16·2	16·7	16·1	15·8	16·0	15·1
6 d	13·8	13·7	15·2	14·0	12·2	8·9	5·3	4·1	8·1	11·3	13·4	19·6	22·3	25·7	25·5	24·9	22·3	21·3	17·7	17·8	15·0	13·4	14·1	18·4	15·7
7 d	15·7	12·8	11·5	12·2	13·5	10·4	9·7	9·7	9·9	12·3	15·3	18·3	19·7	19·6	19·7	19·4	17·1	18·0	17·2	16·0	11·5	9·9	11·9	13·2	14·4
8 d	13·5	14·2	15·2	10·6	8·1	9·6	8·8	11·1	11·9	13·6	15·7	18·3	20·5	21·8	19·0	18·2	18·3	18·0	18·8	16·0	12·9	13·3	13·2	12·7	14·7
9	12·9	13·5	13·5	14·2	11·4	10·9	12·5	12·3	13·0	14·0	16·9	18·5	19·7	20·5	20·4	19·1	18·0	17·5	13·3	15·5	14·6	13·8	15·2	14·2	15·2
10 d	9·9	11·7	15·4	16·8	14·3	12·8	11·0	9·0	7·7	9·6	14·0	17·5	18·9	20·6	21·6	19·7	18·3	16·0	15·1	14·2	15·6	15·3	17·8	15·1	14·9
11	15·9	18·8	15·3	12·7	10·1	9·7	10·2	10·2	9·9	10·9	13·1	16·2	20·3	22·3	22·4	21·4	20·1	18·7	17·9	11·5	13·1	15·2	15·0	14·8	15·2
12	14·5	14·2	14·3	14·1	12·7	12·0	11·7	10·1	9·6	8·8	10·1	13·1	15·9	18·8	20·3	19·6	18·7	17·7	16·2	15·1	13·6	13·8	12·6	12·6	14·2
13	12·5	12·4	12·6	12·6	12·1	12·6	10·7	9·6	9·0	10·2	12·6	15·5	17·2	18·6	19·8	20·4	19·4	18·7	18·0	16·4	15·3	15·2	14·3	14·4	14·6
14	14·7	15·1	16·0	14·0	12·4	11·2	10·0	9·2	9·7	11·2	12·4	15·1	17·1	18·8	19·1	18·7	17·8	17·8	17·3	16·7	14·4	14·9	14·5	14·2	14·7
15	13·9	12·6	11·7	12·4	11·4	10·1	10·3	11·5	12·5	13·5	14·8	16·3	17·5	18·9	20·6	20·5	19·1	17·7	16·3	15·3	14·9	14·1	14·0	13·9	14·7
16	13·6	14·3	14·0	12·4	11·5	10·3	9·3	9·7	10·5	12·7	14·3	17·2	19·4	20·5	20·5	20·9	20·5	19·6	18·5	16·2	16·0	15·1	13·5	13·6	15·2
17	14·3	14·8	11·6	11·1	11·7	9·6	8·8	7·8	8·4	10·5	12·9	15·5	17·8	20·1	21·5	23·6	21·2	19·0	17·8	16·8	16·1	15·6	15·3	14·5	14·8
18	14·8	14·2	13·9	12·6	12·3	11·6	11·5	10·6	10·1	10·1	12·5	15·8	18·4	19·6	19·7	19·8	18·8	18·6	17·0	16·0	15·9	15·1	15·5	15·0	15·0
19	14·4	14·8	14·9	13·5	12·4	11·0	9·6	8·2	8·9	11·4	15·0	17·7	18·9	18·7	19·4	18·7	17·7	17·7	18·1	17·5	16·3	15·4	12·1	15·1	14·9
20	13·8	12·8	12·4	14·3	12·1	10·8	9·9	10·5	10·6	11·9	16·0	18·5	19·2	18·9	18·5	17·9	17·2	16·9	16·3	16·0	15·3	15·1	15·6	16·0	14·9
21	15·1	14·2	14·7	14·2	15·1	11·5	10·1	10·4	11·1	13·3	15·3	17·9	20·4	20·7	19·9	18·6	17·0	16·0	15·4	15·3	15·2	14·9	15·5	15·4	15·3
22 q	15·0	14·7	13·3	12·5	11·6	10·7	10·0	10·5	11·2	12·6	14·2	17·3	19·8	21·5	21·4	19·9	17·1	16·1	15·8	14·5	15·1	15·4	15·4	15·1	15·0
23	14·5	14·2	13·6	12·5	11·5	9·9	8·2	8·3	7·9	13·1	15·5	18·1	19·4	19·1	18·6	18·0	18·1	16·8	15·8	15·1	15·0	14·9	15·3	15·8	14·6
24	15·3	14·9	15·9	15·3	13·3	10·9	9·6	9·1	10·6	12·5	14·9	16·9	18·4	19·6	18·6	17·2	16·7	16·1	15·3	15·2	15·0	15·2	15·1	15·6	14·9
25	10·7	8·7	12·1	13·1	8·7	8·1	8·0	9·4	9·6	10·7	13·0	15·9	19·5	21·3	20·7	20·1	18·5	17·2	16·0	15·3	14·8	14·2	14·1	14·1	*13·9*
26	13·9	13·3	13·3	12·9	11·6	10·6	9·6	9·5	9·8	11·8	13·6	15·8	17·8	19·4	19·3	19·5	19·5	18·0	16·5	16·2	15·9	15·1	15·0	14·2	14·7
27	15·1	15·1	16·6	17·8	11·5	13·3	14·2	9·7	9·7	14·3	15·3	18·0	21·8	22·5	22·2	21·4	17·9	16·2	14·9	14·3	13·4	14·3	15·1	14·8	15·8
28	13·9	13·8	14·3	13·1	11·6	10·3	9·8	10·1	9·7	11·3	12·4	16·1	20·2	21·5	20·5	20·1	18·7	17·0	15·9	15·1	15·0	14·8	15·1	18·3	14·9
29 q	13·0	13·0	13·4	14·2	11·5	9·8	9·0	8·5	7·9	10·1	11·5	14·5	17·1	17·9	18·6	18·1	17·1	16·3	16·2	16·1	16·1	15·5	15·3	14·7	14·0
30 d	14·2	14·2	14·2	14·2	13·8	12·4	11·5	10·6	10·6	10·6	11·8	16·0	19·6	20·6	21·4	21·3	22·4	18·9	20·3	19·6	18·1	17·3	16·2	15·6	*16·1*
Mean	14·1	13·9	14·0	13·6	12·1	11·0	10·2	*9·8*	10·1	11·8	14·0	16·9	19·1	*20·2*	*20·2*	19·7	18·5	17·6	16·7	15·9	15·1	14·9	14·8	14·9	15·0

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

124 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JUNE 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1107	1108	1109	1110	1111	1112	1108	1105	1101	1090	1088	1088	1090	1096	1097	1099	1107	1112	1116	1115	1113	1110	1107	1106	1104
2 q	1106	1106	1107	1108	1110	1111	1108	1107	1107	1100	1089	1082	1082	1092	1100	1102	1108	1110	1112	1112	1112	1111	1107	1108	1104
3 q	1107	1106	1107	1104	1100	1099	1099	1099	1100	1100	1099	1099	1095	1095	1101	1106	1107	1110	1112	1112	1111	1110	1107	1106	1104
4	1106	1106	1106	1106	1107	1108	1106	1105	1107	1105	1100	1088	1088	1093	1099	1102	1105	1106	1107	1107	1109	1111	1111	1107	1104
5	1105	1104	1106	1105	1107	1111	1107	1105	1100	1093	1091	1088	1087	1092	1094	1098	1104	1105	1107	1111	1111	1108	1107	1105	1102
6 d	1106	1105	1102	1099	1095	1099	1099	1096	1095	1088	1092	1084	1086	1098	1113	1124	1136	1137	1142	1129	1124	1119	1115	1106	1108
7 d	1077	1081	1088	1093	1087	1094	1094	1100	1098	1099	1097	1092	1094	1098	1100	1105	1116	1113	1122	1129	1123	1114	1112	1110	1101
8 d	1100	1083	1065	1058	1057	1068	1075	1086	1089	1092	1088	1092	1093	1093	1105	1117	1123	1118	1111	1116	1116	1112	1107	1090	*1094*
9	1092	1093	1099	1100	1104	1104	1102	1100	1096	1093	1088	1089	1094	1101	1110	1111	1114	1117	1124	1119	1118	1112	1095	1093	1103
10 d	1089	1084	1081	1074	1063	1075	1087	1093	1095	1098	1099	1094	1093	1097	1101	1111	1117	1123	1128	1129	1125	1117	1099	1096	1099
11	1100	1087	1083	1093	1098	1100	1105	1107	1105	1099	1098	1100	1101	1101	1103	1110	1112	1117	1118	1127	1117	1112	1110	1110	1105
12	1110	1109	1111	1111	1111	1111	1111	1112	1108	1104	1098	1091	1095	1105	1105	1105	1107	1112	1113	1114	1114	1113	1111	1107	1108
13	1106	1106	1106	1106	1107	1110	1107	1107	1105	1102	1100	1093	1090	1099	1105	1108	1111	1116	1118	1119	1118	1113	1112	1111	1107
14	1110	1111	1108	1108	1110	1107	1109	1108	1110	1105	1101	1099	1100	1102	1106	1110	1112	1112	1112	1113	1115	1116	1112	1110	1109
15	1108	1108	1110	1111	1109	1111	1107	1106	1106	1104	1094	1092	1093	1088	1089	1096	1105	1107	1108	1112	1112	1111	1108	1106	1104
16	1106	1106	1105	1106	1107	1108	1107	1106	1101	1096	1089	1088	1088	1091	1094	1099	1107	1113	1117	1120	1118	1117	1114	1107	1105
17	1105	1095	1099	1105	1103	1099	1095	1093	1093	1097	1093	1089	1095	1099	1104	1108	1118	1114	1111	1111	1111	1110	1111	1110	1108
18	1107	1107	1108	1111	1108	1107	1108	1110	1110	1110	1107	1107	1106	1103	1102	1106	1111	1113	1113	1113	1112	1112	1111	1108	*1109*
19	1107	1108	1108	1110	1111	1112	1107	1105	1102	1096	1095	1098	1100	1101	1100	1101	1106	1110	1110	1111	1112	1116	1113	1108	1106
20	1093	1095	1101	1100	1100	1102	1102	1099	1100	1099	1099	1096	1095	1100	1101	1106	1110	1111	1111	1113	1113	1113	1111	1111	1103
21	1107	1106	1106	1107	1106	1106	1106	1102	1099	1093	1087	1083	1084	1093	1102	1110	1117	1117	1113	1112	1111	1111	1108	1107	1104
22 q	1106	1105	1106	1108	1107	1107	1104	1103	1101	1094	1088	1087	1090	1095	1099	1105	1104	1106	1107	1111	1108	1108	1107	1106	1103
23	1107	1107	1107	1108	1108	1107	1106	1102	1098	1094	1092	1088	1092	1096	1096	1104	1107	1112	1112	1110	1107	1107	1107	1107	1103
24	1107	1107	1108	1107	1106	1105	1099	1094	1093	1090	1091	1087	1092	1100	1105	1106	1110	1112	1112	1111	1108	1107	1106	1105	1103
25	1101	1101	1098	1087	1092	1096	1100	1099	1095	1089	1091	1092	1093	1092	1098	1102	1107	1107	1105	1105	1106	1107	1107	1107	1099
26	1107	1106	1106	1106	1105	1105	1103	1100	1100	1098	1097	1093	1093	1099	1101	1102	1105	1107	1106	1102	1105	1105	1105	1105	1103
27	1105	1105	1102	1092	1087	1088	1087	1088	1088	1090	1094	1096	1100	1107	1112	1113	1120	1123	1119	1118	1117	1113	1111	1109	1103
28	1110	1110	1107	1106	1106	1106	1106	1101	1100	1099	1095	1096	1097	1099	1105	1117	1123	1121	1118	1113	1111	1109	1108	1106	1107
29 q	1106	1106	1107	1106	1101	1105	1106	1104	1102	1098	1093	1090	1094	1098	1099	1101	1107	1110	1106	1106	1107	1106	1106	1106	1103
30 d	1107	1107	1107	1107	1105	1105	1102	1101	1100	1097	1094	1094	1096	1096	1099	1107	1120	1135	1132	1130	1122	1113	1108	1107	1108
Mean	1104	1102	1102	1102	1101	1103	1102	1101	1100	1097	1094	*1092*	1093	1097	1101	1106	1112	1114	1115	*1115*	1113	1111	1108	1106	1104

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

125 ESKDALEMUIR — JUNE 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1 q	18 35	575	501	11 52	74	13 45	19·5	10·6	7 33	*8·9*	18 54	1118	1087	10 10	31	0,1,1,1,1,2,2,0	8	0	82·8
2 q	18 29	570	498	10 17	72	14 39	19·6	10·3	6 6	9·3	18 50	1114	1081	12 23	33	0,0,1,2,1,1,2,1	8	0	82·8
3 q	18 49	556	509	11 18	47	12 47	20·7	9·9	8 40	10·8	19 0	1113	1093	13 3	20	1,2,2,2,2,1,1,0	11	0	82·8
4	20 20	563	504	11 0	59	13 6	23·4	10·6	6 10	12·8	21 15	1112	1086	12 5	26	0,0,1,1,3,2,2,1	10	0	82·9
5	16 50	579	511	10 23	68	13 35	20·5	8·7	8 25	11·8	19 47	1113	1086	12 9	27	0,0,1,1,1,2,2,2	9	0	82·9
6 d	15 17	587	*452*	11 12	*135*	13 23	*27·6*	*0·8*	7 58	*26·8*	18 2	*1146*	1081	11 59	65	1,2,3,4,4,4,3,3	24	1	83·0
7 d	19 38	598	488	7 24	110	14 28	20·7	7·6	3 2	13·1	19 28	1131	1075	0 42	56	3,3,3,2,3,3,4,3	24	1	83·0
8 d	15 41	585	486	10 55	99	13 2	23·1	6·8	4 34	16·3	16 40	1124	*1054*	3 49	70	3,3,3,3,3,3,2,3	23	1	83·0
9	19 6	596	488	7 21	108	13 58	21·3	10·5	4 41	10·8	18 43	1125	1087	11 10	38	2,2,3,2,2,3,3,2	19	1	83·1
10 d	18 51	577	477	11 15	100	14 21	22·3	6·9	8 40	15·4	19 11	1131	1059	4 20	*72*	3,3,3,3,2,3,2,2	21	1	83·1
11	19 59	587	487	10 4	100	14 38	23·2	8·9	7 46	14·3	19 34	1130	1078	1 51	52	2,2,2,1,3,2,3,1	16	1	83·1
12	20 51	564	497	10 55	67	14 35	20·6	8·7	9 51	11·9	20 19	1116	1090	11 30	26	1,1,1,2,2,2,2,1	12	0	83·1
13	21 10	563	501	11 0	62	15 8	21·5	8·8	8 19	12·7	19 19	1120	1089	11 50	31	1,2,2,2,2,3,1,1	14	1	83·3
14	19 34	580	508	12 27	72	14 6	19·4	8·8	7 51	10·6	21 0	1117	1098	11 21	19	2,1,2,2,1,2,2,1	13	0	83·3
15	19 10	563	492	12 38	71	14 31	21·0	9·6	5 52	11·4	20 19	1113	1086	13 49	27	1,1,2,2,2,1,1,1	11	0	83·4
16	18 31	571	516	11 40	55	15 15	21·7	8·8	6 30	12·9	19 32	1122	1087	12 9	35	1,1,2,2,2,2,2,2	14	0	83·4
17	15 38	583	504	16 15	79	15 33	24·2	7·0	7 27	17·2	16 16	1122	1088	11 13	34	2,2,2,2,3,4,1,1	17	1	83·4
18	19 38	567	515	10 37	52	16 0	20·5	9·8	5 4	10·7	19 44	1116	1101	14 0	*15*	0,2,2,1,1,2,2,2	12	0	83·5
19	19 49	584	513	8 32	71	14 6	19·9	7·0	7 18	12·9	21 29	1117	1093	11 20	24	1,1,1,2,2,2,2,2	13	0	83·5
20	17 49	563	501	10 30	62	11 59	19·6	8·6	6 22	11·0	19 44	1116	1088	0 46	28	2,1,1,2,2,2,2,1	13	1	83·5
21	18 55	564	516	10 12	48	12 54	20·9	9·6	7 3	11·3	16 40	1118	1082	11 45	36	2,2,0,1,2,2,1,1	11	0	83·6
22 q	19 54	560	512	10 54	48	13 51	21·9	9·7	6 33	12·2	19 42	1111	1084	11 23	27	0,0,2,1,2,2,1,1	9	0	83·7
23	16 7	557	514	8 51	43	12 14	19·7	6·2	8 1	13·5	17 53	1113	1084	11 50	29	1,1,2,2,2,2,1,0	11	0	83·8
24	19 33	563	525	11 55	*38*	13 28	20·4	7·7	7 4	12·7	17 12	1113	1086	11 25	27	1,1,2,1,2,1,2,2	12	0	83·8
25	19 29	565	508	2 50	57	13 30	21·4	7·8	5 40	13·6	16 58	1111	1083	3 20	28	3,3,1,1,1,1,2,1	13	1	83·8
26	20 11	571	517	11 0	54	13 42	19·8	9·0	7 52	10·8	17 40	1108	1089	11 50	19	1,1,1,1,2,1,2,2	11	0	83·8
27	17 29	567	489	9 15	78	13 3	23·2	8·0	7 47	15·2	16 55	1125	1087	6 58	38	2,3,3,3,3,3,2,1	20	1	83·8
28	23 42	563	516	11 20	47	13 22	22·5	8·9	8 40	13·6	16 20	1125	1094	10 20	31	2,1,2,1,2,3,1,2	14	1	83·8
29 q	20 8	556	501	12 30	55	14 40	18·8	7·5	8 0	11·3	17 15	1111	1089	11 32	22	1,2,1,2,2,1,1,0	10	0	83·9
30 d	16 21	*629*	501	12 14	128	16 20	24·4	8·9	8 13	15·5	17 10	1137	1093	10 54	44	0,2,3,2,4,5,2,3	21	1	84·1
Mean	- -	574	502	- -	72	- -	21·4	8·4	- -	13·0	- -	1120	1085	- -	34	-	14·1	0·43	83·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

126 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	547	540	540	555	556	540	528	495	500	474	461	468	493	544	515	531	571	551	555	554	542	524	510	512	525
2	504	527	516	525	524	521	514	510	504	504	508	513	516	523	529	544	543	541	544	549	544	539	539	536	526
3	543	529	527	533	527	528	533	530	522	509	499	501	510	520	524	527	526	532	544	544	543	546	542	544	528
4 d	541	541	542	551	548	547	540	528	521	519	514	496	500	528	520	566	543	535	552	547	540	547	560	535	536
5	542	542	532	526	524	528	537	528	508	481	520	521	511	512	521	537	542	546	563	548	545	541	551	548	531
6 d	548	535	537	536	536	540	527	468	477	473	501	520	501	496	504	541	544	543	545	543	536	530	528	525	*522*
7	528	528	528	519	524	524	522	517	506	498	493	492	493	502	524	532	547	554	551	564	563	568	525	532	526
8	532	537	535	527	523	536	517	524	486	480	486	492	500	527	540	535	566	560	562	564	548	551	539	537	529
9	533	537	538	535	532	526	516	519	520	512	511	516	517	520	543	544	546	544	553	548	550	550	544	541	533
10 q	535	533	533	535	535	531	525	521	513	504	496	499	516	544	560	567	560	559	551	551	551	539	540	539	535
11	542	533	532	536	537	536	531	525	518	508	496	492	508	528	546	553	547	544	548	551	550	552	555	552	534
12	551	547	550	544	543	539	537	537	524	504	501	493	496	518	537	543	548	554	558	552	552	548	547	547	536
13	548	548	543	537	539	542	540	533	524	516	517	513	512	516	520	526	535	540	547	547	550	549	551	547	535
14	542	540	542	544	543	539	540	535	521	508	492	478	492	516	524	554	549	543	550	551	548	551	546	547	533
15 q	542	542	542	542	541	541	536	534	527	520	508	510	509	514	526	542	544	542	551	552	553	551	548	548	536
16	544	537	543	544	546	547	543	536	528	520	524	521	519	524	555	544	556	558	566	587	579	552	547	541	*544*
17 d	544	549	541	529	535	535	532	526	528	530	531	520	529	539	547	558	567	610	562	577	567	531	533	540	544
18	540	543	544	545	547	536	532	524	520	509	506	501	500	511	531	544	553	552	550	548	548	539	537	540	533
19	541	539	540	532	548	547	539	533	524	516	514	512	515	527	531	535	541	547	551	561	565	564	553	539	538
20 q	539	537	538	537	536	536	531	525	516	508	500	495	497	512	532	548	551	548	547	551	547	550	550	549	533
21	551	553	548	546	545	544	532	525	516	501	489	497	508	513	527	539	540	549	555	554	551	551	548	549	535
22 q	550	546	545	544	545	540	536	531	522	512	505	508	515	519	524	537	544	551	555	564	559	544	542	540	537
23	538	536	536	536	535	535	529	523	515	509	506	513	520	528	559	555	571	569	591	575	582	579	559	549	544
24	533	539	534	543	546	543	534	522	517	507	501	496	501	513	524	528	543	552	545	544	542	537	534	532	530
25	532	532	532	532	532	531	523	513	510	486	487	492	504	511	523	539	539	539	547	551	551	551	551	544	527
26	544	547	545	544	543	541	543	537	529	511	500	503	520	517	532	531	541	547	559	555	553	548	545	544	537
27 q	541	537	540	540	539	537	535	528	523	517	513	511	515	516	518	516	529	541	555	555	553	552	550	548	534
28	547	548	557	552	555	559	548	529	517	513	511	524	511	521	543	536	541	551	551	553	556	560	562	556	542
29	548	536	551	544	544	543	560	525	521	515	515	523	532	532	544	551	547	557	551	555	562	564	555	547	543
30 d	544	540	510	516	511	536	528	525	512	508	504	508	502	517	531	541	547	551	545	546	547	550	551	539	530
31	523	502	511	524	524	521	520	516	512	507	504	508	516	522	524	525	528	535	540	543	541	540	537	541	523
Mean	540	538	537	537	537	537	533	523	515	506	*504*	504	509	520	531	541	547	550	553	*554*	552	548	545	541	533

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

127 ESKDALEMUIR (D) — 12° + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 d	7·0	13·3	13·3	7·0	15·3	15·7	12·7	10·1	16·1	15·9	18·1	20·5	21·3	24·8	25·2	20·6	21·4	20·1	13·0	17·3	16·3	15·2	11·3	10·8	*15·9*
2	11·4	3·3	7·5	8·5	9·7	9·4	7·9	8·7	8·8	10·2	12·0	15·9	19·4	19·7	20·3	20·1	19·7	17·5	16·3	16·3	16·3	14·7	14·1	15·2	13·5
3	16·0	8·3	10·3	11·2	10·1	13·2	12·6	10·6	11·0	12·9	13·5	15·6	18·7	20·3	19·4	17·1	16·9	16·8	16·1	15·4	15·4	15·4	15·0	14·3	14·4
4 d	13·5	13·4	13·7	13·3	10·6	8·8	8·3	10·6	10·6	12·4	12·9	15·8	18·4	20·5	21·8	21·2	20·1	17·3	17·4	17·5	15·4	15·4	10·5	12·4	14·7
5	17·5	12·4	10·8	11·5	12·0	14·6	11·8	11·7	11·8	14·2	16·0	19·6	21·4	20·9	18·7	17·7	16·9	16·5	15·0	13·6	15·1	15·0	15·2	15·1	15·2
6 d	14·4	11·4	10·6	10·4	7·0	7·8	18·7	17·8	16·0	15·3	15·7	14·2	15·9	17·5	16·5	14·9	15·9	13·7	15·7	16·4	15·8	13·2	13·3	13·6	14·2
7	13·8	13·3	12·6	12·6	11·8	8·8	9·6	9·9	10·1	11·0	12·4	16·7	19·6	20·4	19·1	18·6	17·1	16·7	16·8	17·1	15·7	14·4	11·5	14·1	14·3
8	16·0	14·9	12·2	14·2	16·8	7·9	6·5	7·1	8·7	11·5	14·3	17·5	20·5	22·3	21·1	18·4	18·2	17·7	16·9	16·9	15·3	12·5	13·0	14·0	14·8
9	16·3	13·3	11·6	10·6	10·1	9·0	9·3	10·1	10·4	11·3	12·4	15·1	17·7	18·7	17·8	18·7	17·4	14·6	15·3	15·5	15·5	15·1	14·5	13·5	13·9
10 q	13·5	12·5	11·6	11·1	10·7	9·3	8·9	9·7	10·4	11·8	14·9	18·7	21·6	23·7	22·7	20·8	18·7	17·0	15·8	15·0	12·3	13·0	13·5	13·0	14·6
11	13·5	11·7	12·1	11·6	9·7	7·7	6·9	7·9	9·7	11·3	13·4	15·9	18·9	20·7	20·9	19·6	18·6	17·1	16·0	15·1	15·1	15·0	15·0	14·2	14·1
12	13·7	13·3	14·0	12·4	10·7	10·4	10·3	10·0	10·6	11·9	13·5	17·7	22·0	23·4	23·2	22·3	19·9	17·7	16·3	15·1	14·8	14·7	14·2	14·2	15·3
13	13·9	13·8	13·0	11·9	10·5	10·1	8·8	7·9	8·0	9·7	13·0	17·7	21·1	21·5	21·1	20·4	17·9	15·9	15·2	15·0	15·1	14·6	13·9	14·7	14·4
14	13·2	12·6	12·5	12·9	11·7	12·2	10·7	9·1	9·3	11·1	13·1	16·2	18·8	20·2	20·1	18·9	18·4	17·6	16·5	16·0	15·2	15·1	14·7	14·9	14·6
15 q	14·0	13·5	13·8	12·9	11·4	9·4	8·8	9·6	10·1	12·4	14·9	17·0	19·5	20·5	19·7	18·8	18·3	17·5	17·1	15·8	15·4	15·2	15·3	15·7	14·9
16	15·8	16·0	14·8	11·5	9·9	8·6	8·1	8·1	8·4	10·6	12·8	15·3	18·0	20·4	21·4	20·1	18·7	16·9	16·4	16·6	17·3	12·1	9·7	13·5	14·2
17 d	12·9	13·3	11·9	10·5	9·8	8·0	7·7	8·8	10·0	12·0	15·3	17·8	19·4	21·0	22·1	19·3	19·5	19·7	16·9	16·9	8·8	10·7	14·2	13·9	14·2
18	14·3	14·1	16·0	14·9	13·3	12·9	10·7	10·7	10·6	11·6	11·5	14·3	16·9	17·9	18·7	17·8	16·5	15·7	15·0	14·4	12·4	14·2	14·9	14·9	14·3
19	14·3	14·6	16·0	14·9	12·4	9·6	9·5	8·5	8·6	10·5	14·0	17·1	18·8	20·2	20·7	20·8	20·3	17·9	15·3	15·0	14·4	13·7	13·1	13·2	14·7
20 q	13·5	13·1	12·9	12·2	10·9	9·8	8·9	8·7	8·2	9·0	12·3	15·3	18·4	19·7	20·2	18·7	16·0	14·9	15·0	15·2	15·1	14·9	14·3	14·3	13·8
21	15·0	14·3	12·5	12·2	11·3	10·3	9·4	9·7	9·8	11·6	15·1	18·1	19·7	20·7	20·3	18·6	17·0	16·1	15·8	16·0	15·6	15·2	15·0	15·0	14·8
22 q	14·9	13·7	13·5	13·0	11·2	8·7	7·9	8·8	9·1	11·4	14·1	17·0	19·7	20·4	20·5	20·3	18·7	17·2	16·3	15·4	13·3	14·2	14·2	14·0	14·5
23	13·4	12·6	12·2	10·5	9·4	9·2	9·7	10·0	9·9	11·3	12·4	16·7	19·5	20·4	19·6	19·6	20·5	20·5	21·2	20·5	19·7	13·3	0·7	4·8	14·1
24	7·7	11·4	11·4	12·2	11·5	10·4	10·6	11·7	12·5	14·5	17·7	20·5	21·2	21·3	20·4	18·9	17·7	15·9	14·2	12·5	14·3	15·0	14·4	14·2	14·7
25	13·8	13·4	14·4	12·2	10·8	8·6	7·0	6·3	6·3	9·7	13·5	16·1	17·7	17·9	17·7	16·5	15·7	15·1	15·1	15·0	14·8	15·7	14·5	13·5	13·4
26	13·3	13·9	13·5	13·3	12·6	10·8	10·7	8·9	9·6	11·5	14·8	17·8	20·7	21·4	21·3	18·8	16·5	15·7	14·8	13·8	13·7	14·7	14·8	14·8	14·7
27 q	13·5	13·5	13·4	13·2	12·4	11·7	11·6	10·9	10·5	11·7	14·0	16·1	17·8	18·8	19·1	18·3	17·3	15·7	15·1	14·8	15·0	15·1	14·7	14·3	14·5
28	14·2	13·7	13·3	11·1	10·4	8·0	6·2	7·2	7·8	14·3	16·7	19·6	22·5	21·5	21·2	19·2	17·9	18·4	16·9	15·9	15·5	14·8	14·1	13·2	14·7
29	12·4	15·7	13·9	10·6	10·1	9·3	9·1	8·8	9·1	13·2	16·3	18·7	19·9	20·1	20·7	20·5	18·8	16·8	16·0	16·5	16·2	15·3	5·9	10·1	14·3
30 d	8·8	5·0	0·7	3·9	13·1	8·6	5·2	5·4	8·1	12·3	15·5	17·5	19·9	21·4	19·9	18·7	17·5	17·4	16·6	16·3	15·5	14·3	13·0	8·9	*12·6*
31	7·5	7·8	12·8	11·6	9·5	9·7	9·9	10·5	10·7	12·4	14·3	16·1	17·2	18·5	17·9	16·3	15·8	15·1	14·3	14·2	14·2	14·2	13·4	13·5	13·2
Mean	13·3	12·5	12·3	11·6	11·2	9·9	*9·5*	*9·5*	10·0	11·9	14·2	17·0	19·4	*20·5*	20·3	19·1	18·1	16·9	15·9	15·7	15·0	14·4	13·1	13·4	14·4

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

128 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — JULY 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 d	1096	1098	1063	1023	1006	1010	1033	1056	1095	1081	1089	1099	1106	1113	1123	1121	1126	1154	1162	1147	1137	1129	1113	1110	1095
2	1081	1069	1087	1100	1108	1112	1111	1106	1104	1104	1098	1092	1094	1102	1108	1111	1122	1123	1121	1118	1116	1117	1113	1111	1105
3	1089	1090	1100	1106	1107	1103	1095	1098	1099	1101	1100	1095	1093	1098	1103	1107	1111	1112	1116	1114	1114	1112	1111	1110	1103
4 d	1110	1107	1106	1106	1107	1105	1104	1104	1100	1097	1095	1094	1102	1108	1113	1121	1123	1122	1118	1117	1118	1116	1108	1098	1108
5	1075	1081	1084	1093	1094	1083	1087	1093	1098	1106	1102	1098	1094	1092	1100	1107	1109	1117	1118	1118	1117	1116	1111	1101	1100
6 d	1082	1096	1104	1105	1105	1090	1046	1048	1059	1082	1106	1116	1118	1120	1126	1138	1145	1146	1135	1124	1123	1123	1119	1116	1107
7	1113	1113	1111	1109	1109	1112	1112	1111	1110	1111	1111	1107	1107	1111	1114	1113	1114	1118	1123	1122	1120	1101	1102	1102	*1111*
8	1093	1088	1099	1096	1064	1076	1090	1093	1094	1099	1099	1099	1099	1105	1116	1122	1124	1126	1120	1119	1118	1116	1111	1102	1103
9	1093	1100	1106	1110	1111	1112	1110	1101	1098	1093	1092	1093	1099	1102	1106	1110	1113	1119	1118	1116	1113	1112	1111	1111	1106
10 q	1112	1112	1112	1112	1112	1111	1108	1105	1105	1105	1101	1093	1089	1088	1089	1103	1109	1116	1118	1116	1116	1116	1112	1112	1107
11	1106	1106	1109	1112	1113	1114	1112	1107	1110	1107	1100	1094	1095	1103	1106	1105	1111	1117	1117	1117	1113	1109	1107	1107	1108
12	1107	1109	1107	1107	1111	1110	1101	1101	1101	1100	1092	1090	1096	1096	1101	1109	1113	1119	1120	1118	1114	1111	1111	1110	1106
13	1107	1105	1109	1111	1112	1111	1107	1105	1101	1097	1096	1094	1095	1095	1104	1107	1113	1117	1113	1111	1111	1111	1108	1108	1106
14	1105	1106	1107	1107	1110	1108	1106	1104	1105	1100	1100	1100	1095	1093	1094	1101	1112	1113	1112	1112	1111	1111	1110	1107	1105
15 q	1109	1109	1110	1112	1114	1117	1112	1106	1105	1097	1099	1099	1100	1102	1105	1105	1107	1111	1111	1112	1111	1108	1108	1107	1107
16	1107	1106	1104	1107	1111	1112	1109	1107	1104	1105	1097	1089	1086	1088	1098	1107	1107	1112	1109	1107	1112	1124	1119	1108	1106
17 d	1104	1102	1104	1111	1112	1113	1112	1111	1106	1099	1088	1088	1093	1100	1100	1106	1110	1117	1134	1142	1149	1129	1123	1116	1111
18	1105	1100	1100	1102	1112	1113	1113	1108	1105	1107	1106	1102	1102	1106	1111	1114	1123	1124	1124	1125	1125	1120	1115	1112	1111
19	1111	1110	1100	1096	1098	1100	1100	1101	1105	1101	1099	1099	1098	1093	1099	1107	1110	1112	1112	1111	1112	1111	1107	1104	1104
20 q	1106	1107	1107	1108	1111	1112	1111	1106	1101	1104	1098	1090	1089	1093	1094	1096	1106	1111	1108	1107	1107	1106	1107	1107	1104
21	1106	1101	1101	1104	1106	1107	1108	1106	1101	1105	1095	1088	1088	1096	1102	1108	1116	1117	1116	1111	1107	1110	1108	1107	1105
22 q	1107	1108	1108	1110	1110	1112	1106	1100	1099	1089	1083	1081	1082	1087	1091	1098	1104	1106	1106	1107	1111	1111	1108	1108	1101
23	1109	1108	1108	1108	1110	1108	1106	1104	1104	1100	1094	1093	1095	1096	1102	1107	1111	1111	1107	1111	1108	1106	1096	1094	1104
24	1105	1107	1109	1107	1107	1107	1106	1106	1104	1106	1102	1099	1099	1099	1101	1110	1113	1118	1123	1126	1118	1113	1112	1112	1109
25	1109	1109	1103	1096	1100	1109	1111	1110	1109	1108	1099	1093	1094	1100	1102	1108	1112	1112	1112	1112	1112	1110	1102	1105	1106
26	1106	1107	1107	1109	1111	1108	1106	1106	1107	1106	1106	1101	1101	1103	1111	1118	1122	1121	1119	1118	1116	1112	1111	1108	1110
27 q	1106	1107	1109	1111	1112	1112	1112	1112	1110	1103	1098	1094	1093	1100	1107	1111	1115	1115	1112	1108	1107	1107	1107	1107	1107
28	1107	1107	1106	1107	1107	1106	1106	1105	1099	1099	1098	1097	1095	1096	1099	1101	1106	1105	1106	1105	1102	1105	1102	1105	1103
29	1108	1101	1090	1099	1103	1105	1104	1099	1092	1087	1082	1083	1087	1090	1095	1104	1114	1117	1114	1110	1106	1109	1111	1090	1100
30 d	1083	1066	1054	1058	1052	1052	1070	1084	1093	1100	1097	1090	1098	1102	1106	1110	1111	1120	1118	1116	1112	1112	1112	1106	*1093*
31	1089	1086	1086	1102	1108	1111	1112	1112	1112	1111	1107	1096	1098	1104	1105	1108	1112	1111	1111	1111	1111	1111	1111	1106	1105
Mean	1101	1101	1100	1101	1102	1102	1101	1101	1101	1100	1098	*1095*	1096	1099	1104	1109	1114	*1118*	1118	1116	1115	1113	1110	1107	1105

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

129 ESKDALEMUIR — JULY 1945

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force									
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range					
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 d	4 1	590	454	9 58	136	13 49	*28·6*	*-3·0*	0 45	*31·6*	18 10	*1171*	*1004*	5 0	*167*	5,4,3,3,4,4,4,3	30	1	84·1
2	16 1	558	492	0 47	66	14 25	20·9	-2·3	1 43	23·2	17 45	1124	1063	0 46	61	4,2,1,2,2,3,2,2	18	1	84·1
3	21 21	554	495	10 41	59	13 29	21·4	7·1	1 44	14·3	18 26	1117	1087	0 40	30	3,3,1,1,2,1,1,1	13	1	84·2
4 d	15 50	587	476	11 39	111	15 8	24·1	7·0	6 37	17·1	16 16	1125	1089	11 26	36	1,1,3,3,4,4,2,3	21	1	84·3
5	18 18	582	466	9 14	116	12 26	22·3	9·7	3 21	12·6	18 26	1120	1069	0 37	51	2,2,3,4,2,2,3,3	21	1	84·3
6 d	0 10	571	*430*	7 40	*141*	6 10	24·3	4·9	5 29	19·4	16 5	1150	1039	6 38	111	3,3,5,4,3,3,2,1	24	1	84·4
7	21 8	611	478	13 0	133	13 21	21·6	7·8	5 48	13·8	18 9	1125	1098	21 51	27	1,1,1,2,3,2,3,4	17	1	84·5
8	21 9	575	469	9 50	106	13 6	23·2	4·3	6 9	18·9	17 5	1129	1058	4 30	71	2,4,2,3,3,3,3,3	23	1	84·5
9	18 1	563	504	10 53	59	13 17	20·5	8·0	5 21	12·5	17 32	1123	1089	0 33	34	2,2,2,1,3,3,2,1	16	1	84·5
10 q	15 34	571	494	10 25	77	13 37	24·2	8·3	5 50	15·9	18 10	1119	1085	13 59	34	0,1,1,1,3,2,2,2	12	0	84·8
11	22 38	560	488	11 14	72	14 6	21·6	6·4	6 19	15·2	18 0	1119	1093	11 30	26	1,1,1,2,2,3,2,1	13	0	84·8
12	18 20	563	486	11 18	77	13 53	24·0	8·3	5 7	15·7	18 0	1123	1088	11 12	35	1,2,1,2,3,2,1,1	13	0	84·8
13	22 15	557	502	12 37	55	13 4	22·0	7·3	7 57	14·7	17 20	1117	1093	11 30	24	1,1,1,1,2,1,1,2	10	0	84·8
14	15 24	559	472	11 46	87	14 10	20·5	8·8	7 49	11·7	17 13	1116	1090	13 52	26	1,2,1,3,3,3,1,1	15	0	84·8
15 q	18 20	563	506	12 38	57	14 0	20·7	8·0	6 3	12·7	5 40	1118	1095	10 0	23	0,0,1,1,1,2,1,1	7	0	84·8
16	19 56	597	513	12 29	84	14 43	22·8	7·2	5 51	15·6	21 42	1126	1083	12 25	43	1,2,0,1,3,3,3,3	16	1	84·8
17 d	17 35	*639*	508	18 6	131	14 20	22·9	2·9	20 18	20·0	20 12	1160	1087	10 50	73	2,1,2,2,2,5,4,3	21	1	84·8
18	16 14	560	494	11 49	66	14 23	19·4	8·9	8 43	*10·5*	10 40	1125	1095	3 8	30	2,2,2,2,2,2,1,2	15	1	84·8
19	21 42	572	510	11 22	62	14 43	21·3	6·9	7 2	14·4	20 44	1116	1086	13 25	30	3,2,2,2,1,1,2,3	16	1	84·9
20 q	19 21	556	488	11 45	68	14 44	20·7	7·7	8 43	13·0	5 10	1113	1087	12 30	26	1,0,1,2,3,2,1,1	11	0	84·9
21	1 21	558	485	10 50	73	13 17	21·3	8·8	6 39	12·5	17 39	1118	1085	12 5	33	1,1,0,2,1,2,0,1	8	0	85·0
22 q	19 41	574	503	10 18	71	15 16	20·8	7·4	6 14	13·4	5 40	1113	1081	12 0	32	1,1,1,1,2,1,2,0	9	0	85·0
23	18 46	606	493	23 57	113	18 22	22·6	-2·1	22 26	24·7	17 1	1113	1089	10 57	24	0,1,1,1,3,3,3,5	17	1	85·0
24	17 0	558	484	11 55	74	12 6	22·2	2·5	0 1	19·7	19 20	1129	1095	12 4	34	3,2,2,2,2,2,2,0	15	0	85·3
25	20 50	559	478	11 23	81	13 56	18·5	5·8	6 55	12·7	17 24	1114	1090	11 45	24	2,1,1,2,2,2,2,1	13	0	85·3
26	18 29	563	492	11 0	71	13 3	22·2	8·6	8 3	13·6	16 59	1123	1099	11 50	24	1,1,1,2,2,2,1,1	11	0	85·3
27 q	19 19	559	510	11 37	*49*	14 12	19·5	7·7	8 1	11·8	17 15	1117	1089	12 3	28	1,1,0,1,2,2,0,0	7	0	85·3
28	22 35	579	493	11 11	86	12 44	24·1	4·2	6 42	19·9	5 0	1110	1089	12 2	*21*	1,2,2,3,3,2,3,2	18	1	85·3
29	20 58	575	511	10 28	64	15 1	22·1	0·5	22 22	21·6	17 1	1119	1079	10 15	40	3,1,1,2,2,3,3,4	19	1	85·3
30 d	17 2	571	483	12 55	88	13 49	22·2	-1·6	2 36	23·8	17 38	1124	1045	5 15	79	4,4,3,2,3,3,2,2	23	1	85·1
31	23 29	551	492	2 2	59	13 49	18·7	5·1	1 12	13·6	16 31	1113	1081	2 10	32	3,1,1,1,1,1,0,2	10	1	85·1
Mean	- -	572	489	- -	84	- -	22·0	5·5	- -	16·5	- -	1124	1081	- -	43	-	15·5	0·58	84·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

130 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	537	531	531	531	532	529	523	520	520	516	512	506	512	520	528	539	548	551	567	571	555	555	551	552	535
2 d	548	525	520	508	531	524	513	504	499	499	501	504	523	533	521	530	537	537	555	545	539	551	559	537	527
3	530	535	529	535	535	531	524	516	504	502	501	507	520	527	537	536	539	539	536	542	545	542	538	539	529
4	537	539	536	533	531	528	524	516	509	503	498	499	508	519	536	541	543	544	537	538	541	546	549	536	529
5	529	535	535	535	537	524	529	521	519	508	513	510	521	528	532	562	543	538	547	539	535	537	536	536	531
6	536	535	541	543	538	530	535	534	524	511	517	512	507	521	535	531	547	550	543	548	542	539	544	539	533
7	538	539	535	535	536	537	534	527	516	493	481	492	503	520	524	532	539	547	544	551	548	559	539	552	530
8	538	539	538	537	539	536	533	524	511	512	518	516	512	520	531	559	550	546	542	543	549	550	543	539	534
9	537	534	533	531	532	532	529	518	510	496	490	491	499	518	535	538	545	550	553	552	550	547	545	541	529
10 q	541	539	538	538	536	534	527	516	507	484	483	494	507	515	524	538	543	554	558	554	554	550	549	547	530
11	558	558	542	539	542	541	538	528	518	505	506	515	523	529	534	535	538	550	560	565	567	558	567	546	*540*
12	546	547	535	544	546	543	534	526	511	503	502	507	511	516	522	522	540	552	559	559	558	554	550	550	535
13 d	550	546	542	540	543	542	533	531	503	491	496	499	512	503	511	511	523	539	551	550	547	545	542	543	529
14 d	535	538	538	535	516	546	531	515	501	483	496	512	519	520	512	510	515	551	559	542	539	538	540	547	527
15	543	530	531	533	530	523	529	527	508	503	504	521	527	527	528	539	558	542	543	549	554	539	567	538	533
16	547	511	520	528	528	523	514	505	503	500	499	506	515	527	523	516	523	534	538	546	545	543	547	542	524
17	535	534	533	534	534	533	534	529	520	510	496	500	504	515	507	531	534	529	550	548	550	541	537	536	528
18 q	536	535	535	535	534	535	535	530	521	506	493	493	500	519	535	540	543	545	542	543	542	543	539	540	530
19 q	539	539	540	538	538	535	523	510	508	508	509	508	519	527	531	540	543	546	547	546	547	545	547	544	532
20 q	539	537	539	539	539	534	530	524	519	519	523	529	534	539	540	544	547	549	550	551	550	550	550	547	538
21	547	546	541	539	534	531	524	519	515	516	539	530	547	541	536	550	558	546	547	546	546	543	543	540	539
22	540	539	538	536	530	524	523	524	519	519	515	522	534	543	546	559	551	547	547	511	527	534	542	547	534
23 d	532	530	540	509	530	531	527	523	511	496	499	507	515	527	530	529	534	536	539	539	539	533	534	535	526
24 q	532	530	531	525	533	532	524	521	509	501	494	496	507	520	532	537	542	544	543	539	540	542	540	541	527
25	539	538	539	536	533	534	526	522	521	513	503	502	514	521	527	530	537	540	543	546	546	543	542	543	531
26	541	539	539	538	539	539	542	536	527	507	500	503	510	519	528	533	546	550	551	554	556	555	552	549	536
27	551	547	552	540	542	543	539	532	521	510	503	505	510	526	531	555	550	538	550	559	550	555	562	546	538
28 d	558	554	579	495	500	514	501	488	473	460	456	465	491	511	522	527	535	528	526	531	543	529	531	535	*515*
29	546	524	528	527	524	523	519	512	519	502	494	494	506	512	519	523	525	531	531	534	535	531	534	539	522
30	528	527	527	527	528	527	523	517	506	497	503	519	528	532	534	535	535	527	538	540	545	542	547	542	528
31	531	529	531	530	526	524	522	519	515	510	510	515	520	523	533	537	542	541	548	539	533	538	550	546	530
Mean	540	536	537	532	533	532	527	521	512	503	*502*	506	515	523	529	536	540	543	*547*	546	546	544	546	542	531

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

131 ESKDALEMUIR (D) — 12° + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	13·9	13·0	12·5	12·1	11·6	10·7	11·6	11·2	10·0	10·9	12·9	15·2	16·0	17·6	17·6	17·1	16·8	17·0	17·3	17·5	15·5	13·2	14·4	13·6	14·1
2 d	14·0	11·2	3·5	9·0	10·3	3·7	6·0	7·9	9·0	11·2	14·2	17·1	19·4	20·6	20·1	17·9	17·4	15·7	10·7	12·6	14·8	15·7	13·9	11·6	12·8
3	12·6	11·9	15·1	13·2	12·8	9·9	8·7	8·5	8·9	10·6	13·5	17·2	19·9	19·9	19·0	17·2	16·9	16·9	16·1	15·6	15·3	14·0	12·5	13·4	14·1
4	12·9	14·0	11·8	12·5	12·6	10·9	10·7	10·1	11·9	13·7	15·4	17·3	19·0	19·9	19·1	18·1	16·5	15·0	14·0	13·7	14·2	14·0	12·9	11·7	14·2
5	11·2	12·9	12·5	11·6	10·6	8·6	8·3	9·4	8·8	12·1	16·1	18·2	18·6	21·3	20·8	19·9	17·0	12·6	13·6	14·1	14·5	14·4	13·5	13·3	13·9
6	12·9	12·5	12·4	10·4	13·9	10·3	9·9	10·4	13·0	15·0	16·7	19·2	20·5	21·7	20·7	18·3	16·5	15·4	13·5	13·5	13·7	14·1	14·8	13·8	14·7
7	13·0	13·1	12·2	12·5	11·3	9·0	8·2	7·6	8·7	11·0	12·6	15·2	19·8	22·5	21·9	18·9	16·7	14·8	13·0	12·6	13·0	12·9	10·4	12·1	13·5
8	10·6	11·5	11·9	11·7	11·3	9·4	8·6	8·6	9·2	11·3	14·3	17·6	20·1	20·9	20·9	21·2	18·7	15·7	14·3	14·9	14·8	15·2	13·2	13·3	14·1
9	13·0	13·3	15·3	13·5	12·3	10·3	10·0	10·4	11·4	13·1	14·9	16·8	18·9	19·9	19·9	18·4	16·3	14·6	12·9	12·8	13·5	13·7	13·6	13·3	14·3
10 q	13·1	12·7	12·8	12·6	12·0	10·2	9·0	7·5	6·2	7·7	10·1	14·0	18·8	22·1	21·7	20·4	17·8	16·0	14·9	15·0	14·7	14·2	14·1	13·7	13·8
11	15·2	13·3	11·9	12·3	11·2	9·6	8·8	8·6	9·1	11·7	14·0	17·7	21·2	22·8	22·4	19·9	17·2	15·2	14·8	15·4	15·5	13·6	9·8	8·3	14·1
12	12·5	11·5	14·0	12·7	9·7	8·7	8·3	8·5	9·5	13·2	16·2	18·7	20·8	22·0	21·7	19·5	17·2	15·5	15·2	15·5	15·5	15·5	15·2	14·4	14·6
13 d	13·7	11·7	11·8	11·1	10·1	9·7	11·5	12·6	11·8	13·5	15·7	18·7	21·3	20·5	18·6	18·4	16·0	13·3	13·1	13·4	13·9	14·0	13·3	9·0	14·0
14 d	10·4	11·9	11·6	11·1	13·0	13·4	10·4	13·1	13·7	16·5	18·1	19·8	23·0	23·6	21·5	20·1	16·5	16·5	10·5	12·4	15·9	15·4	14·7	14·3	*15·3*
15	11·5	11·1	11·3	11·0	9·9	10·1	10·4	10·4	9·6	13·6	15·1	15·8	16·9	17·3	15·6	15·1	15·8	15·1	15·5	16·1	15·6	13·4	12·7	9·6	13·3
16	4·3	2·7	7·9	9·2	9·5	8·6	8·5	8·3	8·5	10·0	12·8	15·7	18·9	19·5	18·0	15·7	14·4	14·1	13·5	13·7	13·3	14·2	12·4	12·0	11·9
17	12·5	12·0	11·7	11·8	11·7	10·7	10·1	8·8	8·7	11·3	13·6	16·3	17·9	19·6	19·0	18·7	17·2	15·0	13·7	12·6	14·1	14·0	13·9	13·5	13·7
18 q	13·2	13·1	12·6	12·3	11·9	10·9	10·0	8·8	8·0	9·7	12·6	18·0	21·2	21·1	20·4	18·7	16·5	14·0	12·8	13·1	14·0	14·0	14·1	13·9	14·0
19 q	14·0	13·3	12·9	11·5	11·5	10·7	9·7	9·8	10·8	12·3	14·5	16·4	18·2	18·0	16·2	14·4	13·7	13·7	14·5	14·4	14·2	13·7	13·2	11·9	13·5
20 q	10·8	11·5	11·6	11·6	10·9	9·9	10·4	10·7	11·3	12·0	13·4	15·7	16·7	17·7	17·7	16·8	15·9	15·4	14·9	14·4	14·0	13·4	13·2	12·6	13·4
21	12·5	12·3	11·7	11·4	11·3	9·9	7·9	8·1	7·8	9·9	14·0	18·0	21·6	21·7	20·2	18·9	19·0	17·4	16·7	15·4	14·4	12·5	12·5	12·6	14·1
22	12·7	12·6	12·6	12·4	11·4	10·0	9·3	9·4	10·8	13·5	17·5	22·3	24·1	24·1	22·2	20·8	18·3	18·3	18·9	11·7	11·8	13·3	13·2	11·6	15·1
23 d	10·3	13·4	8·1	16·2	14·0	9·9	8·9	9·0	10·9	13·3	16·4	19·1	20·9	21·1	19·5	16·7	14·6	13·5	13·2	13·2	13·2	11·7	10·7	11·9	13·7
24 q	11·6	11·5	10·9	13·1	12·6	9·9	9·5	9·4	9·7	11·5	14·2	17·3	19·7	20·4	18·9	16·4	14·3	13·5	13·4	12·6	13·3	12·9	12·9	13·1	13·4
25	13·0	12·9	13·0	13·2	11·7	10·8	9·7	10·1	9·6	11·6	15·1	18·4	21·7	22·3	20·3	18·4	16·1	14·0	12·9	12·8	13·3	12·8	12·4	12·3	14·1
26	12·6	12·4	12·3	12·1	11·8	10·8	10·7	10·7	11·1	12·4	15·6	19·2	21·6	21·5	19·6	17·2	15·1	13·5	13·3	14·0	14·1	13·6	13·4	13·0	14·2
27	12·4	12·3	12·3	10·8	11·5	9·8	8·9	8·8	9·3	11·5	14·2	18·0	21·2	21·9	20·0	19·1	17·6	16·0	15·6	15·8	9·7	13·6	13·9	13·0	14·1
28 d	11·3	8·9	2·9	−10·5	−2·9	4·3	3·4	5·2	6·5	9·7	12·1	16·6	19·4	21·3	20·6	20·5	16·5	16·1	14·7	12·3	2·8	11·5	12·4	12·2	*10·3*
29	13·3	10·8	12·7	11·2	10·6	9·9	9·3	8·3	8·1	10·0	12·2	15·4	18·3	18·7	18·7	17·2	14·9	13·7	13·3	13·3	13·2	12·4	10·4	10·6	12·8
30	11·9	12·2	12·1	11·5	11·0	9·9	10·0	10·4	10·7	12·6	15·7	18·5	19·1	17·8	15·2	14·3	14·3	14·0	13·9	14·0	14·6	14·4	13·7	11·7	13·5
31	11·7	12·1	12·1	12·9	11·1	10·8	10·6	10·8	11·5	13·0	14·6	16·9	17·5	17·1	16·8	16·0	15·2	14·9	14·2	13·5	12·8	13·6	14·3	10·1	13·5
Mean	12·2	11·9	11·5	11·2	11·0	9·7	*9·3*	9·4	9·8	11·9	14·5	17·4	19·7	*20·5*	19·5	18·1	16·3	15·1	14·2	13·9	13·7	13·7	13·1	12·3	13·7

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

132 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — AUGUST 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1106	1106	1107	1109	1111	1111	1108	1105	1105	1101	1098	1093	1093	1099	1100	1100	1107	1112	1112	1117	1118	1113	1110	1106	1106
2 d	1093	1046	1034	1021	1034	1076	1090	1094	1094	1095	1094	1088	1085	1092	1102	1109	1117	1122	1129	1127	1119	1110	1095	1096	*1090*
3	1101	1104	1103	1097	1100	1105	1108	1111	1108	1099	1096	1093	1094	1100	1107	1111	1113	1114	1116	1116	1116	1114	1113	1111	1106
4	1111	1108	1107	1107	1108	1108	1107	1107	1107	1107	1104	1098	1095	1099	1105	1111	1113	1114	1112	1112	1110	1110	1108	1106	1107
5	1106	1107	1107	1108	1108	1110	1105	1105	1097	1098	1093	1092	1093	1098	1106	1115	1128	1134	1124	1116	1111	1111	1111	1111	1108
6	1110	1108	1104	1086	1081	1087	1095	1099	1096	1099	1091	1083	1081	1088	1105	1114	1115	1117	1113	1108	1111	1111	1106	1101	1100
7	1102	1104	1106	1106	1107	1107	1107	1108	1109	1110	1101	1095	1088	1091	1105	1110	1118	1123	1121	1116	1111	1100	1104	1101	1106
8	1099	1101	1105	1107	1107	1108	1110	1110	1107	1096	1089	1092	1091	1093	1096	1105	1119	1129	1129	1120	1114	1110	1103	1107	1106
9	1107	1107	1105	1106	1107	1110	1112	1112	1108	1103	1105	1107	1101	1102	1108	1115	1119	1119	1118	1113	1109	1108	1108	1107	1109
10 q	1107	1107	1107	1108	1110	1111	1108	1105	1101	1094	1088	1086	1082	1086	1092	1103	1110	1108	1107	1107	1107	1106	1106	1107	1102
11	1101	1090	1095	1101	1106	1106	1104	1102	1100	1095	1091	1086	1087	1093	1100	1113	1118	1116	1111	1107	1106	1110	1106	1101	1102
12	1100	1100	1101	1101	1105	1107	1107	1106	1103	1102	1093	1084	1090	1095	1101	1108	1113	1113	1112	1111	1108	1108	1108	1107	1103
13 d	1106	1105	1106	1108	1111	1111	1107	1100	1100	1099	1098	1101	1106	1114	1124	1128	1131	1130	1123	1116	1113	1113	1111	1106	1111
14 d	1091	1094	1096	1100	1101	1087	1093	1093	1091	1094	1093	1084	1089	1104	1117	1128	1133	1132	1138	1130	1113	1111	1111	1109	1105
15	1104	1098	1103	1106	1110	1108	1107	1107	1105	1095	1095	1099	1099	1107	1114	1117	1123	1128	1118	1113	1112	1117	1098	1091	1107
16	1069	1081	1095	1102	1108	1110	1112	1113	1111	1104	1098	1092	1089	1092	1104	1107	1111	1113	1113	1111	1111	1110	1107	1105	1103
17	1105	1106	1107	1106	1107	1107	1107	1107	1107	1105	1100	1094	1093	1090	1099	1105	1116	1122	1119	1116	1111	1111	1111	1110	1107
18 q	1107	1107	1107	1107	1108	1110	1111	1109	1107	1106	1102	1094	1092	1090	1093	1102	1107	1113	1117	1117	1113	1112	1111	1110	1106
19 q	1107	1107	1107	1107	1110	1111	1114	1113	1111	1106	1099	1093	1094	1099	1102	1107	1108	1107	1107	1106	1106	1108	1108	1108	1106
20 q	1107	1107	1107	1107	1108	1108	1107	1107	1106	1101	1094	1087	1087	1094	1099	1102	1105	1105	1104	1104	1105	1106	1106	1106	1103
21	1106	1106	1107	1106	1107	1105	1106	1105	1103	1094	1082	1080	1081	1093	1099	1100	1104	1111	1112	1111	1110	1111	1110	1109	1102
22	1108	1107	1107	1107	1109	1108	1105	1102	1101	1093	1085	1082	1083	1090	1099	1107	1119	1137	1159	1167	1147	1130	1120	1111	*1112*
23 d	1107	1095	1081	1082	1080	1096	1102	1101	1100	1101	1100	1098	1102	1111	1117	1124	1124	1123	1116	1113	1112	1117	1117	1112	1105
24 q	1108	1111	1111	1111	1107	1110	1112	1116	1112	1103	1098	1093	1099	1108	1112	1116	1118	1116	1113	1111	1108	1109	1110	1108	1109
25	1110	1111	1109	1110	1108	1108	1110	1107	1104	1099	1094	1089	1095	1107	1117	1119	1122	1118	1117	1112	1111	1111	1111	1110	1109
26	1111	1111	1111	1111	1110	1110	1107	1105	1104	1101	1093	1088	1089	1099	1107	1113	1116	1113	1110	1105	1103	1105	1106	1106	1106
27	1105	1105	1100	1105	1107	1108	1107	1105	1101	1102	1100	1096	1093	1094	1100	1104	1110	1113	1112	1112	1118	1110	1103	1101	1105
28 d	1102	1095	1017	927	1016	1083	1105	1108	1110	1108	1105	1103	1105	1110	1114	1128	1136	1131	1126	1123	1119	1111	1111	1110	1096
29	1099	1102	1106	1107	1111	1111	1111	1111	1108	1108	1100	1097	1098	1102	1108	1113	1119	1119	1116	1112	1112	1114	1112	1108	1109
30	1108	1111	1111	1111	1112	1112	1111	1112	1108	1101	1098	1096	1101	1105	1107	1111	1111	1112	1112	1111	1110	1112	1112	1111	1109
31	1111	1111	1111	1108	1111	1111	1111	1109	1106	1106	1105	1102	1101	1106	1111	1114	1112	1111	1111	1113	1116	1116	1110	1104	1109
Mean	1104	1102	1099	1096	1101	1105	1107	1106	1104	1101	1096	*1092*	1093	1098	1105	1112	1117	*1119*	1118	1115	1113	1111	1109	1106	1105

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

133 ESKDALEMUIR — AUGUST 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force						
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	18 55	591	500	12 2	91	14 30	18·8	9·6	8 42	9·2	20 20	1119	1092	11 42	27	1, 1, 2, 2, 1, 2, 3, 2	14	1	85·1
2 d	0 30	585	464	3 46	121	13 40	22·3	1·3	2 10	21·0	18 37	1131	1011	3 15	120	4, 4, 2, 2, 3, 3, 3, 2	23	1	85·1
3	20 39	552	496	11 0	56	12 51	21·9	6·5	7 23	15·4	20 10	1118	1091	11 45	27	2, 2, 1, 2, 2, 2, 2, 1	14	1	85·2
4	22 48	574	490	12 0	84	13 2	20·3	9·7	24 0	10·6	17 20	1115	1092	12 12	23	1, 1, 1, 1, 2, 2, 1, 3	12	0	85·2
5	15 49	575	500	9 41	75	13 6	21·8	7·2	5 1	14·6	17 33	1136	1089	11 8	47	2, 2, 1, 2, 3, 3, 3, 1	17	1	85·2
6	17 33	563	499	12 45	64	13 30	23·2	8·0	3 48	15·2	17 15	1119	1078	12 20	41	2, 3, 2, 2, 3, 3, 2, 2	19	1	85·2
7	21 18	574	473	10 35	101	13 36	23·0	7·0	7 13	16·0	18 0	1124	1087	12 42	37	1, 0, 1, 2, 2, 2, 2, 3	13	1	85·1
8	15 40	575	504	12 8	71	15 30	22·3	8·1	7 19	14·2	18 12	1133	1088	10 25	45	2, 0, 0, 2, 2, 3, 2, 2	13	1	85·1
9	18 27	558	487	11 20	71	14 29	20·5	9·4	6 45	11·1	17 21	1121	1099	12 55	22	2, 0, 0, 1, 2, 1, 1, 0	7	0	85·1
10 q	18 8	561	480	9 51	81	14 4	22·7	6·0	8 6	16·7	16 35	1111	1081	12 21	30	0, 0, 2, 2, 2, 1, 1, 1	9	0	85·1
11	22 38	579	503	9 55	76	13 38	23·1	7·7	23 5	15·4	16 11	1119	1085	11 42	34	2, 0, 0, 2, 1, 2, 2, 3	12	1	85·1
12	18 20	572	498	9 39	74	13 50	22·3	7·7	6 10	14·6	16 30	1116	1083	11 48	33	2, 2, 1, 1, 2, 3, 2, 1	14	1	85·1
13 d	24 0	564	487	10 41	77	12 41	22·0	1·4	23 48	20·6	16 55	1133	1095	10 15	38	2, 2, 3, 2, 3, 2, 1, 4	19	1	85·1
14 d	18 54	577	480	9 22	97	13 0	*25·2*	5·6	18 49	19·6	18 43	1143	1082	11 35	61	3, 3, 2, 3, 3, 3, 3, 2	22	1	85·1
15	22 19	585	493	10 12	92	12 21	17·6	5·0	23 40	12·6	17 25	1130	1081	24 0	49	2, 2, 2, 2, 2, 3, 2, 4	19	1	85·1
16	23 0	558	494	10 24	64	12 50	20·1	−1·9	1 3	22·0	18 17	1114	1065	0 52	49	3, 1, 1, 1, 3, 2, 2, 2	15	1	85·1
17	18 16	558	494	10 48	64	13 55	20·6	8·0	7 49	12·6	17 50	1124	1088	13 32	36	0, 1, 2, 1, 2, 3, 2, 0	11	1	85·3
18 q	18 15	549	488	11 34	61	13 0	21·8	6·9	7 51	14·9	18 54	1120	1088	13 58	32	0, 1, 1, 2, 2, 2, 1, 0	9	0	85·4
19 q	18 48	558	503	11 23	55	12 50	19·1	9·0	6 32	10·1	6 45	1117	1093	12 30	24	0, 1, 1, 1, 1, 1, 1, 1	7	0	85·4
20 q	19 4	554	515	8 54	*39*	14 10	18·2	9·6	5 20	8·6	5 4	1111	1083	11 42	28	1, 1, 1, 2, 2, 1, 0, 0	8	0	85·5
21	16 49	571	512	8 41	59	12 48	23·3	7·3	6 30	16·0	17 46	1113	1077	10 55	36	0, 1, 1, 3, 3, 3, 2, 0	13	1	85·5
22	18 11	582	492	19 18	90	13 13	24·9	8·7	19 40	16·2	18 56	*1173*	1080	11 25	93	0, 1, 2, 1, 2, 4, 4, 3	17	1	85·5
23 d	1 52	573	488	9 59	85	12 46	22·0	4·1	2 9	17·9	15 41	1125	1070	2 3	55	4, 3, 1, 2, 2, 2, 1, 2	17	1	85·6
24 q	16 51	547	490	10 50	57	13 11	20·5	8·9	7 10	11·6	16 30	1119	1092	11 30	27	1, 2, 1, 1, 1, 1, 1, 0	8	0	85·6
25	19 41	547	496	10 38	51	13 7	22·7	9·1	8 20	13·6	16 40	1123	1088	11 34	35	0, 1, 2, 1, 1, 1, 0, 0	6	0	85·7
26	20 50	558	498	10 55	60	13 5	22·3	10·5	7 3	11·8	16 45	1117	1086	11 51	31	0, 1, 1, 1, 2, 2, 1, 1	9	0	85·7
27	23 36	580	500	10 29	80	13 19	22·7	7·9	20 20	14·8	20 18	1120	1092	13 20	28	2, 1, 0, 1, 2, 3, 3, 3	15	1	85·7
28 d	2 11	*643*	*446*	10 3	*197*	13 32	22·4	*−16·0*	3 55	*38·4*	16 40	1138	*903*	3 39	*235*	5, 6, 2, 3, 3, 3, 4, 2	28	2	85·7
29	23 5	547	485	10 49	62	14 3	19·6	7·5	7 43	12·1	17 5	1122	1094	0 48	28	2, 1, 2, 2, 2, 2, 1, 2	14	1	85·8
30	20 22	547	492	9 38	55	11 50	19·5	9·7	6 0	9·8	17 18	1113	1094	11 25	*19*	1, 1, 1, 3, 2, 3, 2, 2	15	0	85·8
31	22 53	563	508	10 25	55	13 2	17·8	9·7	23 28	*8·1*	21 10	1118	1099	12 20	*19*	1, 1, 2, 1, 1, 1, 2, 3	12	0	85·8
Mean	− −	568	492	− −	76	− −	21·4	6·4	− −	15·0	− −	1124	1078	− −	45	−	13·9	0·68	85·4

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

134 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	533	533	533	533	530	528	523	518	506	499	497	499	511	520	530	544	545	542	552	542	546	543	546	533	529
2	536	530	526	541	541	537	533	522	515	519	511	513	514	519	519	522	534	537	542	540	545	542	542	535	530
3	537	533	531	537	539	539	527	520	514	510	515	520	526	535	533	538	537	545	546	545	546	544	549	553	534
4 d	555	557	542	530	535	533	527	487	486	509	512	491	503	515	513	519	523	526	530	546	541	526	533	532	524
5	538	528	526	528	528	519	514	511	510	506	506	511	522	530	538	511	533	539	542	541	542	535	541	538	527
6	542	537	529	528	527	522	523	516	511	504	506	509	510	510	531	536	534	535	540	546	547	548	542	537	528
7	538	537	533	534	537	542	539	522	515	506	500	502	513	518	534	539	539	537	541	538	540	546	546	542	531
8	540	538	537	536	535	533	527	519	509	499	499	502	508	519	529	534	537	539	539	543	549	565	549	550	531
9	548	543	543	541	542	538	531	527	521	509	506	512	522	530	527	529	538	545	546	546	545	545	543	547	534
10 q	538	539	540	539	539	538	536	530	520	506	506	508	510	522	533	541	541	545	545	546	544	538	539	538	533
11	542	538	535	536	539	539	541	537	526	513	514	513	522	520	529	538	557	548	534	528	543	549	525	527	533
12 d	532	549	527	530	513	522	526	514	508	507	502	514	515	514	530	538	538	534	537	542	542	541	540	543	527
13	536	539	538	538	539	541	539	537	533	515	503	499	510	519	510	530	538	549	535	530	538	540	539	534	530
14 q	534	534	537	537	534	535	534	530	526	518	514	511	522	523	522	526	530	538	543	544	539	538	539	539	531
15 q	540	539	540	539	538	538	535	530	519	511	513	518	529	537	534	534	533	537	542	542	540	542	545	545	534
16	541	539	534	536	539	538	535	537	532	532	533	538	538	534	534	542	543	540	534	536	531	530	541	545	537
17 d	545	555	543	549	544	502	525	528	514	440	456	498	514	540	546	526	544	531	514	517	518	546	529	518	523
18 d	533	519	522	538	547	527	527	514	486	502	487	475	509	525	553	545	558	519	507	499	507	503	487	495	516
19	462	527	524	524	524	522	522	518	506	502	496	501	514	519	521	519	523	530	529	522	522	508	515	518	*515*
20	515	526	525	528	522	538	532	529	518	507	490	504	518	526	533	537	529	536	535	531	537	538	536	535	526
21	534	530	531	533	534	534	533	526	518	512	513	511	512	520	519	514	519	529	538	535	545	539	525	537	527
22	531	527	525	526	533	532	530	526	515	506	499	497	506	510	522	523	527	534	533	537	538	537	534	534	524
23 q	534	536	533	533	537	538	536	523	507	496	493	499	510	518	523	526	531	536	540	541	542	543	542	544	528
24 q	542	541	541	542	545	545	542	534	522	510	498	499	514	526	531	538	538	537	543	546	549	556	560	555	536
25	550	547	546	550	557	560	554	547	538	526	510	502	518	530	534	533	538	546	541	539	542	542	540	547	*539*
26	534	534	537	537	536	538	538	538	528	511	502	506	518	523	526	533	540	531	538	551	548	546	549	549	533
27	548	546	541	526	528	534	535	533	525	519	502	475	475	500	513	518	525	529	538	548	547	546	538	540	526
28	545	533	534	538	538	530	537	540	531	522	502	499	498	507	514	528	537	535	540	541	539	541	542	538	530
29	538	535	534	534	538	544	548	537	522	510	506	510	519	525	533	541	535	526	529	538	547	545	547	545	533
30 d	540	536	538	537	537	549	549	519	514	514	506	486	510	512	526	537	541	545	522	530	530	538	530	533	528
Mean	536	537	534	535	536	535	533	526	517	508	*503*	504	514	521	528	531	536	537	537	538	540	*540*	538	537	529

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

135 ESKDALEMUIR (D) — 12′ + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	10·8	11·6	12·0	11·7	11·7	10·2	9·0	8·2	8·7	9·9	12·6	14·8	17·8	18·2	17·6	17·6	15·9	15·1	14·8	14·3	13·4	14·2	10·6	8·4	12·9
2	9·7	7·1	9·4	10·6	9·1	9·7	9·8	11·1	10·6	11·5	13·4	16·8	18·8	19·1	19·0	17·0	15·0	13·5	13·3	13·5	13·3	12·4	11·0	9·0	12·7
3	10·3	11·1	11·5	11·5	11·2	10·3	9·4	8·9	10·0	11·9	15·0	17·8	18·9	18·6	17·4	15·8	14·6	14·3	14·2	13·9	13·5	12·7	12·6	10·3	13·2
4 d	12·9	13·5	5·8	8·4	9·2	8·6	6·8	7·4	13·8	14·2	16·9	19·6	19·6	19·1	18·7	16·8	15·3	14·0	12·9	8·0	6·8	9·9	12·7	12·7	12·7
5	14·1	10·6	9·9	10·6	9·7	9·3	8·8	8·2	9·7	13·4	16·1	19·2	20·4	21·4	20·3	15·1	14·0	13·6	14·3	14·6	14·5	13·7	12·9	11·7	13·6
6	11·0	9·6	10·0	9·7	9·5	8·8	9·5	9·1	9·7	11·3	14·2	17·9	20·5	19·7	17·4	16·0	14·0	13·3	12·0	12·8	13·0	13·1	9·1	10·1	12·6
7	12·2	11·6	12·4	12·1	10·5	9·6	8·4	7·9	7·9	9·7	13·0	17·4	19·6	20·2	18·9	16·8	14·9	13·4	13·3	13·3	13·2	12·0	12·4	13·6	13·1
8	14·2	13·1	12·5	11·3	11·4	10·6	9·1	8·6	9·3	11·5	14·3	17·6	19·3	19·4	18·6	16·6	15·2	13·7	13·7	13·4	13·9	13·7	10·7	8·3	13·3
9	9·7	10·9	11·3	11·5	11·5	10·8	9·8	8·8	8·8	10·3	13·1	16·5	18·5	19·6	18·6	16·4	15·2	14·9	14·9	14·2	13·6	13·3	12·7	10·6	13·1
10 q	10·6	11·8	11·9	11·7	11·6	11·5	10·8	9·5	9·6	10·7	12·9	16·3	17·9	18·6	18·1	17·7	15·9	15·0	13·4	14·2	11·1	12·3	11·7	11·5	13·2
11	11·3	10·7	10·6	11·6	11·3	10·6	9·7	9·5	8·8	10·7	12·7	15·7	18·6	17·9	17·1	17·0	17·3	16·7	12·1	13·5	13·1	5·2	7·0	8·4	12·4
12 d	9·5	18·0	8·9	7·1	11·2	10·2	9·2	8·3	9·0	9·9	12·4	16·9	20·4	20·2	18·9	18·9	17·9	16·4	14·3	13·6	13·5	12·6	12·1	11·9	13·4
13	11·1	11·5	11·3	11·7	11·9	11·8	11·6	10·6	9·7	9·5	10·6	13·3	16·9	19·9	20·1	20·1	18·1	17·0	11·7	8·7	13·5	12·6	11·8	10·6	13·1
14 q	11·5	13·3	14·4	12·0	11·9	11·8	10·7	10·3	10·5	11·5	12·4	15·3	17·2	16·9	15·9	15·3	15·2	15·0	13·4	12·4	12·4	12·9	12·6	12·4	13·2
15 q	11·8	11·9	12·0	11·5	11·8	10·7	10·1	10·4	11·1	13·3	15·2	17·0	18·6	18·9	17·6	16·0	14·7	14·2	13·5	13·2	12·6	12·7	12·5	11·4	13·4
16	10·7	9·8	10·6	10·7	11·3	11·3	11·5	11·8	11·9	12·1	12·4	14·9	17·0	17·2	18·0	18·0	16·6	15·1	12·5	11·3	11·5	11·2	11·7	10·8	12·9
17 d	11·5	4·7	4·4	10·4	11·2	14·2	12·4	12·2	11·5	11·5	17·9	19·2	22·5	21·5	23·9	20·5	11·5	10·6	12·9	12·4	9·6	7·9	7·2	12·3	13·1
18 d	6·9	11·7	21·2	13·2	9·9	8·2	8·9	10·6	9·9	12·1	14·5	15·8	18·7	19·9	23·5	21·7	9·7	7·9	8·8	12·6	3·5	6·1	1·4	1·7	11·6
19	10·6	14·2	9·8	10·8	10·9	11·2	9·7	8·8	9·3	11·5	11·7	15·5	17·0	17·2	16·1	14·3	12·7	12·0	11·2	7·0	7·0	8·8	7·2	8·0	*11·4*
20	11·3	13·5	12·7	12·8	14·1	12·3	10·6	9·7	8·8	11·5	13·2	17·7	19·6	19·3	17·8	17·0	15·8	14·7	14·4	13·4	12·4	13·0	12·7	12·6	*13·8*
21	12·5	12·4	12·3	12·4	12·3	11·8	11·0	9·9	9·6	10·4	13·0	15·8	18·9	20·9	21·3	19·3	18·1	15·7	14·0	12·2	9·6	5·7	6·9	9·7	13·2
22	8·4	9·0	11·0	11·5	12·7	10·8	10·7	9·7	9·5	10·1	12·4	15·5	17·6	17·9	18·5	17·3	15·6	14·8	12·5	12·4	12·5	12·5	12·5	11·7	12·8
23 q	12·2	13·6	12·8	12·5	12·1	11·8	10·6	9·4	8·7	9·7	11·9	15·9	19·0	19·6	19·0	17·1	15·8	14·7	14·2	13·7	13·1	12·5	12·4	11·8	13·5
24 q	12·4	12·4	12·9	13·1	12·8	12·4	11·3	9·8	8·6	9·3	10·9	14·9	18·6	20·2	19·0	16·6	14·7	14·1	13·9	13·1	12·2	12·3	11·0	10·3	13·2
25	10·6	10·7	11·5	11·4	10·5	9·9	9·7	7·9	7·0	8·5	11·9	16·0	19·0	19·6	18·8	16·0	14·8	14·1	13·1	12·7	13·9	12·6	11·9	8·2	12·5
26	9·6	10·6	12·1	12·1	11·4	11·1	10·4	9·4	8·7	9·7	11·6	14·1	16·2	16·9	16·0	16·0	15·6	11·5	12·8	14·4	12·3	13·1	12·9	12·0	12·5
27	11·7	11·4	10·4	11·5	12·4	11·8	9·9	8·2	7·5	8·8	11·6	15·9	17·8	17·1	18·2	18·3	16·9	14·7	13·7	13·4	13·3	12·3	9·4	8·4	12·7
28	9·6	8·8	9·8	12·3	11·2	10·6	9·3	8·4	8·3	9·8	11·4	13·5	16·3	17·7	17·7	16·6	15·1	13·6	12·6	12·9	12·4	11·9	11·4	10·6	12·2
29	12·1	11·9	11·9	12·2	12·0	11·8	10·8	8·8	8·0	9·2	11·6	15·3	17·9	18·6	17·9	17·3	16·0	14·7	11·6	12·8	9·4	11·5	12·6	11·8	12·8
30 d	12·2	11·9	13·9	10·8	11·4	10·6	10·0	12·4	13·3	9·7	14·6	16·3	21·0	20·7	18·9	16·7	15·2	14·9	13·6	14·2	10·5	8·3	9·7	4·3	13·1
Mean	11·1	11·4	11·4	11·4	11·3	10·8	10·0	*9·5*	9·6	10·8	13·2	16·3	18·7	*19·1*	18·6	17·2	15·2	14·1	13·1	12·7	11·8	11·4	10·8	10·2	12·9

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

136 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — SEPTEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1107	1107	1110	1111	1111	1112	1112	1110	1107	1105	1100	1096	1098	1097	1099	1100	1103	1106	1107	1109	1110	1112	1111	1112	1106
2	1108	1106	1104	1101	1101	1104	1105	1105	1105	1101	1100	1098	1099	1106	1111	1112	1112	1113	1111	1111	1112	1112	1111	1110	1107
3	1106	1106	1108	1108	1108	1110	1112	1113	1111	1107	1099	1095	1094	1098	1102	1104	1106	1106	1106	1109	1111	1111	1110	1105	1106
4 d	1100	1089	1087	1094	1100	1105	1106	1110	1099	1093	1093	1098	1106	1106	1109	1112	1116	1123	1124	1120	1117	1115	1112	1112	1106
5	1101	1100	1105	1107	1108	1111	1112	1110	1105	1103	1099	1097	1096	1101	1114	1128	1128	1123	1119	1116	1114	1116	1113	1110	1110
6	1106	1105	1107	1106	1106	1107	1107	1105	1099	1101	1100	1100	1103	1105	1107	1112	1113	1113	1115	1112	1111	1110	1109	1107	1107
7	1107	1108	1107	1106	1106	1106	1107	1107	1107	1104	1101	1100	1099	1102	1106	1112	1116	1115	1112	1111	1111	1110	1106	1105	1107
8	1105	1106	1106	1107	1108	1110	1112	1111	1107	1099	1095	1095	1100	1104	1107	1112	1112	1112	1111	1109	1107	1105	1108	1107	1106
9	1103	1105	1106	1106	1106	1106	1109	1108	1103	1095	1089	1090	1093	1100	1110	1108	1108	1108	1107	1107	1107	1109	1110	1105	1104
10 q	1105	1106	1106	1107	1107	1106	1106	1106	1103	1096	1089	1085	1087	1094	1099	1102	1106	1109	1111	1110	1111	1111	1110	1110	1103
11	1108	1107	1107	1106	1106	1107	1106	1105	1107	1105	1100	1098	1095	1099	1100	1103	1107	1118	1138	1141	1123	1094	1092	1105	1107
12 d	1106	1063	1064	1085	1093	1100	1101	1106	1105	1104	1101	1098	1099	1107	1111	1112	1115	1118	1118	1114	1113	1112	1111	1108	*1103*
13	1107	1107	1107	1107	1107	1106	1107	1107	1101	1104	1101	1098	1099	1105	1106	1107	1110	1119	1131	1132	1119	1115	1113	1112	1109
14 q	1111	1107	1104	1104	1107	1110	1112	1111	1108	1107	1104	1100	1097	1096	1099	1104	1106	1110	1111	1112	1112	1113	1112	1112	1107
15 q	1111	1110	1108	1107	1106	1108	1111	1111	1107	1103	1100	1096	1096	1100	1105	1107	1106	1106	1108	1107	1109	1111	1110	1107	1106
16	1107	1107	1107	1107	1106	1106	1106	1105	1104	1105	1095	1088	1087	1087	1087	1093	1100	1110	1113	1118	1118	1117	1113	1108	1104
17 d	1087	1051	1056	1050	1051	1064	1075	1088	1097	1109	1106	1102	1102	1127	1152	1166	1185	1182	1154	1138	1135	1105	1084	1087	1106
18 d	1084	1090	1081	1076	1093	1100	1105	1106	1112	1111	1112	1118	1122	1124	1147	1189	1250	1243	1170	1154	1139	1077	1064	1050	*1122*
19	1051	1033	1087	1105	1109	1113	1118	1118	1117	1114	1116	1114	1113	1119	1122	1123	1123	1120	1123	1129	1125	1122	1114	1111	1110
20	1108	1107	1107	1107	1103	1100	1108	1110	1112	1111	1110	1106	1108	1113	1119	1120	1117	1113	1113	1116	1116	1114	1114	1114	1111
21	1114	1114	1114	1113	1112	1112	1112	1112	1111	1107	1106	1102	1105	1108	1119	1129	1123	1123	1123	1123	1119	1113	1116	1112	1114
22	1105	1106	1107	1107	1106	1110	1112	1112	1111	1110	1108	1107	1107	1108	1111	1112	1112	1112	1113	1113	1112	1113	1113	1113	1110
23 q	1112	1107	1108	1111	1111	1111	1112	1112	1111	1107	1101	1095	1095	1099	1104	1107	1109	1111	1110	1109	1108	1109	1110	1109	1107
24 q	1109	1110	1110	1108	1107	1107	1109	1108	1107	1106	1103	1093	1085	1088	1099	1107	1111	1111	1110	1107	1106	1106	1101	1099	1104
25	1101	1102	1105	1105	1104	1102	1105	1103	1100	1094	1091	1088	1089	1093	1098	1103	1109	1111	1116	1116	1111	1112	1112	1107	1103
26	1107	1110	1107	1106	1108	1110	1111	1110	1110	1110	1105	1098	1094	1098	1101	1107	1115	1120	1118	1112	1112	1112	1110	1108	1108
27	1107	1107	1107	1108	1101	1102	1108	1110	1110	1107	1100	1102	1105	1101	1100	1104	1110	1112	1112	1111	1108	1111	1111	1108	1107
28	1100	1099	1099	1092	1091	1101	1105	1104	1103	1100	1100	1101	1101	1099	1100	1105	1107	1108	1110	1111	1111	1110	1108	1109	1103
29	1107	1107	1107	1107	1106	1106	1105	1110	1110	1107	1100	1094	1094	1096	1100	1106	1113	1120	1124	1118	1114	1110	1106	1106	1107
30 d	1106	1106	1094	1093	1100	1103	1106	1111	1106	1105	1100	1099	1095	1105	1111	1113	1117	1119	1129	1134	1137	1128	1113	1102	1110
Mean	1103	1100	1101	1102	1103	1105	1107	1108	1107	1104	1101	*1098*	1099	1103	1109	1114	1119	*1121*	1119	1118	1115	1111	1108	1106	1107

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

137 ESKDALEMUIR — SEPTEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS															3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination					Vertical force								
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ	γ				°A.
1	18 40	569	490	11 1	79	12 52	19·6	7·6	23 27	12·0	21 0	1116	1095	12 53	21	1,0,0,1,2,2,3,3	12	1	86·0
2	18 28	548	502	11 23	46	13 40	19·7	6·2	1 15	13·5	17 20	1113	1095	11 45	18	2,2,2,2,2,1,1,2	14	1	86·0
3	23 32	562	507	9 58	55	12 34	19·5	8·5	7 8	11·0	7 5	1113	1093	12 31	20	2,0,1,3,2,1,0,2	11	0	86·0
4 d	1 47	573	452	8 12	121	11 59	22·3	3·3	19 59	19·0	17 50	1129	1082	2 0	47	3,2,4,3,4,2,3,2	23	1	86·1
5	18 10	557	491	15 39	66	13 12	22·0	7·8	6 58	14·2	16 10	1131	1096	11 52	35	2,1,2,2,2,3,2,2	16	1	86·1
6	21 50	562	495	10 19	67	12 32	20·9	7·9	22 53	13·0	18 33	1116	1098	10 40	18	2,1,1,2,1,2,2,3	14	1	86·2
7	22 11	557	494	11 40	63	13 12	21·1	7·1	7 0	14·0	16 40	1117	1099	12 40	18	1,2,2,2,2,2,0,2	13	1	86·2
8	20 59	584	495	10 15	89	13 3	19·8	6·8	23 38	13·0	17 48	1113	1094	10 47	19	1,1,1,2,2,1,3,2	13	1	86·1
9	0 30	557	502	10 35	55	13 3	20·4	7·7	7 30	12·7	14 40	1112	1088	10 21	24	2,1,1,1,2,2,1,2	12	0	86·0
10 q	15 53	550	502	10 30	48	13 48	18·9	8·6	0 1	10·3	20 30	1113	1084	11 30	29	2,0,1,2,2,1,2,1	11	0	86·1
11	21 9	*605*	497	21 51	108	12 55	19·8	−1·3	21 55	21·1	19 2	1147	1087	22 25	60	1,0,1,2,2,3,4,4	17	1	86·1
12 d	1 29	579	486	10 30	93	12 53	22·3	5·3	3 48	17·0	17 30	1120	1041	1 57	79	4,3,2,3,3,2,2,1	20	1	86·1
13	17 30	558	495	11 18	63	13 16	21·9	4·3	19 18	17·6	19 11	1137	1095	11 22	42	1,0,1,2,3,3,3,1	14	1	86·0
14 q	18 47	549	509	11 11	*40*	13 2	18·1	9·7	7 7	*8·4*	20 30	1114	1094	13 8	20	2,1,1,1,2,1,1,0	9	0	86·0
15 q	22 42	549	506	9 41	43	13 48	19·4	9·7	6 45	9·7	0 10	1113	1095	12 8	18	1,0,2,2,1,1,1,1	9	0	86·0
16	24 0	565	523	20 58	42	15 10	18·6	5·2	24 0	13·4	21 20	1119	1083	14 5	36	1,1,2,2,2,3,1,3	15	1	86·0
17 d	21 45	601	*415*	9 33	*186*	14 44	28·1	−2·3	2 3	30·4	16 40	1198	1041	3 50	157	4,4,3,4,4,4,4,5	32	2	86·0
18 d	16 41	589	441	21 45	148	15 19	*30·4*	*−10·2*	21 48	*40·6*	16 54	*1297*	1048	23 33	*249*	4,3,3,3,4,5,4,5	31	2	86·0
19	20 19	538	423	0 38	115	1 3	22·3	−1·1	0 1	23·4	19 29	1131	*1010*	1 9	121	5,1,1,2,2,1,2,2	16	1	86·0
20	15 9	553	468	10 42	85	13 5	20·1	7·0	7 55	13·1	15 15	1123	1096	5 12	27	2,2,2,3,1,3,2,0	15	1	86·0
21	20 41	557	502	15 1	55	14 18	22·5	4·4	22 20	18·1	15 38	1130	1100	11 47	30	0,0,1,2,3,2,3,2	13	1	85·9
22	20 22	542	492	11 43	50	14 12	19·4	7·9	0 3	11·5	18 51	1116	1104	1 0	*12*	2,2,0,1,1,2,1,1	10	0	85·9
23 q	23 24	547	491	10 19	56	12 50	20·2	8·3	8 10	11·9	7 30	1113	1093	12 10	20	2,1,2,2,1,0,0,0	8	0	85·9
24 q	22 3	569	495	10 54	74	13 30	20·4	8·5	8 27	11·9	15 9	1112	1083	12 19	29	0,0,1,1,1,1,1,2	7	0	85·9
25	23 24	569	491	11 28	78	13 37	20·7	5·0	23 20	15·7	19 0	1119	1087	12 19	32	0,1,1,2,3,2,2,3	14	1	85·9
26	20 15	558	498	10 20	60	13 17	18·6	8·0	8 20	10·6	17 38	1124	1093	12 43	31	2,0,1,1,2,3,2,1	12	1	85·9
27	20 34	557	455	12 2	102	15 46	18·7	6·8	7 17	11·9	17 15	1113	1099	11 10	14	1,2,1,4,3,1,2,2	16	1	85·9
28	0 24	557	493	12 11	64	13 43	18·7	7·0	8 20	11·7	18 46	1113	1087	4 1	26	2,2,2,2,1,1,1,1	12	1	85·9
29	20 40	558	502	10 39	56	13 20	18·8	7·5	8 25	11·3	18 21	1126	1093	11 40	33	1,1,2,1,0,3,3,2	13	1	85·9
30 d	6 1	558	474	11 22	84	12 46	23·1	2·5	23 18	20·6	20 25	1141	1088	2 45	53	3,2,3,3,2,2,3,3	21	1	86·2
Mean	− −	563	486	− −	76	− −	20·9	5·5	− −	15·4	− −	1129	1085	− −	43	−	14·8	0·80	86·0

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

138 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	527	534	523	526	533	534	533	526	514	506	496	500	511	519	523	526	526	522	533	529	530	524	531	537	523
2	537	535	534	536	538	541	540	533	520	502	502	499	506	526	510	523	530	538	533	538	537	538	537	536	528
3 q	534	540	535	534	536	537	534	528	518	509	501	501	504	513	524	530	529	537	539	540	540	540	540	539	528
4 q	537	536	537	539	539	541	541	536	525	509	503	506	514	524	530	537	538	544	543	545	546	541	539	536	*533*
5	542	532	532	537	541	543	541	529	521	505	494	502	507	510	517	522	532	534	505	513	521	525	532	533	524
6	533	534	534	536	536	536	534	526	513	501	487	485	494	509	521	529	534	536	540	540	532	545	530	534	525
7	533	532	533	533	533	534	535	531	522	508	494	494	513	525	530	533	536	539	539	549	561	533	506	513	527
8	517	521	518	521	527	528	533	522	520	513	509	509	496	508	506	529	511	531	534	536	536	536	537	536	522
9	534	537	533	534	537	541	538	522	525	513	504	503	504	506	509	514	522	531	533	535	535	534	533	533	525
10 q	533	532	533	535	535	536	536	530	519	504	497	500	505	515	529	530	535	537	538	537	537	539	539	537	528
11 q	536	536	535	535	534	536	536	532	525	509	501	499	509	521	529	538	541	543	544	545	544	545	547	546	532
12 d	545	541	543	545	547	546	544	545	547	536	528	505	496	513	513	507	508	501	486	501	523	519	517	505	523
13	528	512	511	521	524	521	522	518	485	501	498	498	498	509	514	515	516	521	528	538	530	525	521	518	515
14	526	526	528	528	528	532	525	528	525	517	509	506	507	500	513	523	518	529	525	525	521	540	530	524	522
15	518	527	526	531	532	529	532	529	519	513	501	505	507	517	522	522	516	513	531	536	536	537	525	529	523
16 d	530	529	528	532	535	523	529	533	517	512	512	515	512	510	518	513	502	510	505	525	525	530	531	529	521
17	532	529	529	529	533	540	537	528	509	490	475	485	495	505	510	512	513	520	528	519	527	533	533	541	519
18	540	526	527	526	532	533	525	528	520	512	505	503	514	512	520	521	525	527	523	512	520	527	529	525	522
19	521	532	532	533	534	537	537	529	518	510	511	509	506	517	522	527	523	523	525	534	545	547	510	525	525
20	525	516	526	521	527	525	521	520	517	509	510	517	525	528	529	532	533	536	536	537	546	525	521	520	525
21	528	529	532	533	533	535	534	529	522	513	514	516	523	529	532	536	528	536	537	541	537	548	536	537	531
22	534	535	536	537	538	537	534	531	524	513	511	505	513	516	518	504	500	512	537	537	537	532	526	521	525
23	530	527	527	527	528	528	529	525	520	510	507	509	514	528	532	535	538	538	541	541	539	537	533	540	528
24 d	539	537	536	547	529	544	529	526	498	490	483	439	461	513	525	509	518	553	520	481	503	494	467	454	508
25 d	469	487	466	497	533	518	518	521	497	431	450	453	450	485	519	510	505	494	502	501	509	518	518	518	*495*
26 q	517	514	511	521	521	521	519	514	506	498	490	493	498	505	514	516	520	522	525	525	525	525	525	524	515
27	521	521	522	526	527	529	530	528	525	517	507	506	510	523	520	523	517	513	515	507	501	486	478	456	513
28 d	395	423	475	480	505	520	512	509	507	505	498	494	512	515	514	509	528	501	522	509	541	490	505	523	500
29	526	518	516	511	519	520	520	518	512	502	488	497	505	516	516	521	522	524	524	523	531	537	524	527	517
30	518	516	517	518	520	523	522	523	519	513	509	508	508	500	516	520	524	533	524	523	527	531	529	526	519
31	528	524	523	522	526	528	527	524	518	511	508	511	518	522	522	526	526	528	527	527	532	544	546	531	525
Mean	524	524	525	527	531	*532*	531	527	517	506	500	*499*	504	514	520	522	523	527	527	527	531	530	525	524	521

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

139 ESKDALEMUIR (D) — 12° + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	8·6	6·2	7·6	11·1	11·0	10·9	10·7	9·7	8·9	9·3	11·5	14·3	16·6	16·9	16·0	14·4	12·6	12·1	11·5	12·5	5·1	7·0	11·7	12·3	11·2
2	12·3	12·0	11·9	12·1	11·7	11·4	10·8	9·6	9·1	11·3	14·5	16·8	18·9	20·5	19·6	16·6	14·5	13·3	13·3	12·5	12·4	11·7	11·6	11·7	13·3
3 q	12·4	11·0	11·5	11·2	11·5	11·4	10·8	9·5	8·0	8·8	11·5	15·9	17·6	18·0	17·0	16·0	13·9	13·3	13·3	12·9	12·5	12·4	12·3	11·8	12·7
4 q	11·5	11·9	12·4	12·0	11·9	11·8	11·1	9·0	7·9	8·2	10·7	14·7	17·3	18·0	17·2	15·8	14·1	13·5	13·5	13·3	13·1	12·4	12·2	11·9	12·7
5	9·8	8·8	9·7	10·6	8·4	9·0	8·9	8·3	7·9	8·8	13·4	18·7	20·6	21·9	22·0	19·1	17·7	17·5	17·6	13·0	9·7	8·3	11·2	11·7	13·0
6	11·7	11·7	11·8	11·9	11·8	11·4	10·4	10·2	8·0	8·1	11·3	15·2	17·9	18·8	18·6	16·5	14·3	13·5	13·2	13·0	10·0	8·6	9·2	7·7	12·3
7	10·5	11·6	12·4	12·4	11·9	11·5	10·4	8·7	7·8	8·5	11·3	14·9	17·3	17·9	16·6	15·2	14·2	13·7	13·3	13·3	14·2	7·9	2·8	-1·1	11·5
8	6·8	10·6	11·5	10·9	10·7	10·1	9·5	8·1	7·9	8·7	12·0	17·8	20·2	21·2	20·5	19·6	18·9	14·4	12·9	12·5	11·8	11·5	11·5	11·5	13·0
9	11·9	12·0	11·7	11·7	12·3	14·7	13·4	12·4	10·6	11·3	11·7	14·0	16·3	18·0	17·3	16·5	13·6	12·9	12·4	12·2	11·7	11·5	11·5	11·2	13·0
10 q	11·4	11·6	11·7	11·8	11·7	11·6	10·5	9·2	8·2	8·9	12·7	17·0	18·1	18·5	18·2	16·0	14·5	14·0	13·2	12·4	12·3	11·9	11·7	11·7	12·9
11 q	11·7	11·6	11·7	11·7	11·6	11·5	10·4	9·4	8·2	8·9	11·7	15·2	17·0	17·9	17·2	15·8	14·2	14·1	14·1	13·4	12·9	12·4	12·3	11·6	12·8
12 d	11·3	11·5	11·8	11·7	11·7	9·8	9·1	10·2	7·9	8·6	16·1	21·2	23·3	25·8	20·1	21·3	16·5	11·5	1·8	10·6	7·3	3·9	7·1	11·9	12·6
13	9·0	8·7	11·9	12·8	11·9	11·8	13·5	13·2	11·7	12·7	15·8	17·8	17·8	17·6	16·6	14·7	12·5	12·2	11·3	8·4	9·0	8·8	7·6	7·9	12·3
14	7·5	9·8	10·0	10·7	10·9	10·7	11·6	12·4	11·0	10·7	13·1	16·1	18·0	18·0	18·5	15·9	10·6	10·1	13·1	11·8	5·3	4·1	5·9	8·0	11·4
15	9·4	10·5	10·6	9·8	10·3	11·5	11·5	10·0	9·1	10·7	13·1	16·0	18·3	16·9	17·2	16·1	15·2	15·1	12·7	12·4	12·3	11·7	9·4	9·9	12·5
16 d	10·6	11·0	10·6	12·0	9·8	9·7	13·3	13·4	12·2	14·0	16·8	18·9	21·1	21·5	24·9	24·0	14·4	10·6	7·5	9·7	10·4	10·8	11·3	11·4	*13·7*
17	12·2	12·3	12·4	12·0	11·9	10·9	11·8	10·5	9·9	11·9	15·0	18·5	20·1	20·3	19·4	17·4	15·0	13·5	12·8	6·9	10·6	12·2	11·7	10·6	13·3
18	10·9	10·1	10·8	10·9	12·1	11·6	12·2	9·3	8·8	10·8	15·2	18·0	18·7	18·3	17·0	14·9	14·1	13·5	13·1	14·2	11·5	11·5	10·7	10·6	12·9
19	13·2	12·0	11·8	11·5	11·5	10·7	10·6	9·7	8·7	11·0	15·3	18·0	19·7	18·7	16·6	15·3	14·0	15·2	14·2	13·2	7·0	0·9	9·3	7·2	12·3
20	5·2	2·6	9·0	11·6	11·0	10·0	9·7	8·9	8·3	9·8	13·4	15·7	16·8	15·0	13·7	12·5	12·5	13·1	13·0	13·2	8·8	7·9	8·5	9·4	10·8
21	11·9	12·2	11·8	11·6	11·4	10·7	10·3	10·1	9·7	9·9	13·3	15·2	15·8	15·9	15·0	14·1	12·8	13·2	12·5	12·4	11·3	12·2	8·4	9·4	12·1
22	11·7	12·3	11·7	11·9	11·7	10·6	10·3	9·7	8·8	9·4	13·1	16·1	19·7	20·5	22·5	21·9	17·4	14·3	12·4	11·7	11·9	9·1	8·6	8·8	13·2
23	12·9	11·5	10·8	11·5	10·9	10·6	10·1	9·5	8·8	10·0	13·3	15·5	16·5	17·1	15·8	14·7	13·4	13·4	13·6	12·7	12·1	11·6	10·5	9·7	12·4
24 d	11·3	10·3	9·4	11·2	10·4	9·5	9·7	8·9	10·6	15·3	17·1	21·2	21·3	18·0	19·4	15·7	14·3	15·1	11·5	5·7	2·5	3·9	-2·1	1·6	11·3
25 d	-2·0	-18·9	-6·9	-10·1	7·2	9·3	10·4	12·5	12·4	15·0	19·6	18·4	21·8	22·1	22·1	17·4	17·4	13·3	15·7	11·6	12·2	10·6	10·1	9·3	10·4
26 q	8·5	8·3	9·5	10·0	10·6	10·7	10·6	10·5	10·5	11·4	12·8	14·2	14·9	15·0	14·4	13·3	13·5	13·3	13·1	12·6	12·2	10·8	11·5	10·6	11·8
27	10·6	11·1	11·2	11·4	11·5	10·8	10·8	10·6	9·8	9·6	11·5	14·0	14·8	16·0	15·4	15·2	15·4	14·3	13·4	11·5	7·6	3·3	-0·3	-9·2	10·4
28 d	-6·9	-5·8	4·5	2·5	9·7	8·7	9·9	9·4	8·5	9·4	13·0	15·7	16·9	17·8	17·4	17·5	15·8	14·0	8·1	11·5	1·6	-0·2	10·6	10·6	9·2
29	11·4	9·9	8·8	10·1	10·8	9·7	9·4	9·1	8·8	9·8	12·0	15·6	17·7	17·8	16·1	14·7	13·7	10·7	14·1	12·9	11·7	10·6	6·6	9·8	11·7
30	8·7	9·0	10·4	9·6	9·8	9·7	9·9	9·8	9·3	9·8	12·9	16·0	18·2	14·1	14·9	14·2	12·5	9·7	11·4	11·7	11·3	11·5	10·8	11·0	11·5
31	10·6	10·4	9·9	10·2	11·1	10·5	9·9	9·8	9·7	10·6	13·1	15·1	16·2	15·5	14·2	13·5	13·6	12·9	11·5	10·6	11·6	11·6	10·9	8·8	11·7
Mean	9·6	*9·0*	10·1	10·3	11·0	10·7	10·7	10·1	9·3	10·4	13·5	16·5	18·2	*18·4*	17·8	16·3	14·4	13·3	12·4	11·8	10·1	9·1	9·2	9·0	12·1

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

140 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — OCTOBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1100	1096	1101	1107	1111	1112	1116	1118	1120	1119	1115	1108	1106	1107	1109	1112	1114	1116	1117	1117	1118	1113	1112	1111	1111
2	1110	1110	1110	1108	1107	1109	1111	1112	1112	1113	1108	1108	1105	1106	1114	1116	1114	1113	1113	1113	1112	1112	1112	1111	1111
3 q	1111	1106	1106	1107	1107	1108	1112	1113	1117	1112	1110	1107	1107	1108	1111	1113	1116	1111	1111	1110	1109	1110	1110	1110	1110
4 q	1109	1109	1108	1107	1107	1111	1114	1118	1114	1111	1107		1105	1106	1110	1111	1110	1106	1106	1106	1106	1109	1111	1112	1109
5	1109	1108	1108	1105	1104	1104	1106	1111	1112	1111	1107	1105	1107	1112	1118	1123	1130	1135	1154	1156	1147	1146	1130	1122	*1120*
6	1118	1115	1113	1112	1112	1111	1112	1112	1111	1105	1099	1095	1095	1101	1108	1116	1115	1111	1111	1111	1114	1111	1111	1108	1109
7	1107	1107	1110	1111	1111	1111	1111	1112	1111	1106	1100	1098	1096	1099	1105	1109	1112	1111	1110	1106	1105	1100	1070	1087	1104
8	1099	1106	1112	1112	1112	1111	1111	1112	1108	1106	1105	1102	1108	1112	1123	1131	1128	1119	1116	1113	1111	1112	1112	1112	1112
9	1112	1111	1111	1111	1111	1104	1101	1105	1105	1105	1103	1098	1096	1101	1108	1112	1115	1113	1112	1111	1111	1111	1111	1111	1108
10 q	1111	1111	1111	1110	1109	1111	1111	1112	1116	1113	1107	1100	1101	1102	1106	1111	1110	1109	1109	1108	1107	1110	1108	1107	1109
11 q	1107	1107	1108	1108	1108	1108	1109	1111	1111	1106	1099	1099	1100	1104	1107	1111	1111	1108	1107	1107	1107	1107	1107	1107	1107
12 d	1107	1107	1106	1106	1106	1106	1105	1103	1100	1091	1083	1095	1105	1129	1171	1138	1135	1153	1160	1136	1117	1113	1105	1077	1115
13	1070	1093	1099	1101	1105	1107	1107	1106	1111	1110	1105	1105	1108	1111	1113	1122	1123	1119	1118	1115	1113	1112	1104	1094	1107
14	1092	1099	1104	1106	1107	1107	1110	1108	1108	1107	1101	1100	1102	1110	1113	1117	1126	1129	1123	1124	1125	1113	1098	1099	1109
15	1101	1104	1106	1106	1107	1109	1112	1113	1113	1111	1106	1104	1107	1112	1117	1123	1126	1124	1120	1118	1114	1116	1118	1116	1113
16 d	1113	1112	1112	1110	1107	1109	1104	1101	1105	1106	1101	1101	1106	1124	1135	1149	1154	1147	1144	1131	1123	1119	1117	1116	1119
17	1112	1112	1112	1112	1112	1112	1111	1113	1113	1111	1112	1111	1112	1116	1118	1125	1131	1127	1121	1123	1117	1112	1112	1105	1115
18	1094	1096	1100	1104	1102	1103	1105	1106	1105	1102	1102	1106	1110	1117	1120	1119	1114	1114	1118	1123	1123	1120	1118	1114	1110
19	1111	1108	1108	1107	1107	1106	1106	1107	1108	1103	1100	1105	1108	1113	1117	1118	1122	1123	1123	1120	1117	1095	1078	1077	1108
20	1053	1069	1083	1094	1099	1102	1105	1105	1104	1099	1095	1098	1100	1105	1107	1107	1106	1105	1106	1106	1106	1110	1111	1111	*1099*
21	1110	1110	1110	1108	1106	1106	1105	1104	1106	1105	1098	1098	1101	1104	1107	1110	1110	1106	1106	1105	1107	1107	1099	1100	1105
22	1102	1105	1105	1105	1105	1104	1101	1101	1104	1099	1089	1088	1090	1102	1113	1126	1135	1135	1123	1115	1112	1113	1116	1117	1109
23	1112	1112	1112	1111	1111	1108	1107	1106	1105	1104	1099	1099	1101	1105	1108	1111	1111	1111	1109	1108	1107	1108	1111	1110	1108
24 d	1106	1106	1106	1083	1087	1087	1093	1094	1100	1089	1085	1105	1105	1107	1111	1113	1114	1111	1135	1188	1141	1113	1098	1063	1106
25 d	1008	997	989	1011	1033	1066	1086	1093	1100	1109	1100	1106	1112	1125	1161	1183	1179	1190	1157	1159	1153	1135	1126	1120	1104
26 q	1118	1117	1116	1112	1112	1113	1113	1113	1117	1113	1112	1112	1113	1113	1117	1118	1117	1117	1116	1113	1113	1114	1113	1113	1114
27	1113	1113	1112	1112	1111	1111	1110	1111	1112	1111	1106	1109	1111	1113	1118	1126	1129	1127	1131	1141	1140	1125	1094	1017	1113
28 d	1009	970	1052	1075	1087	1094	1106	1111	1112	1107	1100	1104	1108	1115	1119	1125	1125	1137	1136	1140	1125	1123	1123	1119	1101
29	1112	1113	1112	1111	1112	1113	1113	1113	1112	1112	1107	1105	1111	1114	1119	1119	1122	1123	1119	1124	1123	1112	1111	1106	1114
30	1111	1112	1113	1116	1114	1113	1113	1112	1111	1110	1106	1106	1111	1124	1123	1120	1119	1118	1117	1117	1115	1114	1114	1116	1114
31	1112	1111	1111	1112	1112	1112	1111	1111	1111	1106	1102	1106	1109	1112	1112	1111	1111	1111	1113	1113	1112	1111	1102	1106	1110
Mean	1099	*1099*	1102	1103	1105	1106	1107	1109	1110	1107	1102	1103	1105	1111	1117	1121	*1122*	1122	1121	1122	1118	1114	1109	1103	1110

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

141 ESKDALEMUIR — OCTOBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ				°A.
1	20 55	542	491	10 28	51	13 3 17·7	-0·3 20 27	18·0	8 30	1123	1095	1 50	28	2,1,1,1,1,2,4,3	15	1	86·0
2	6 56	545	491	10 50	54	13 47 22·2	7·9 8 23	14·3	15 10	1119	1105	12 30	14	0,1,2,2,3,2,0,0	10	1	85·9
3 q	1 11	542	496	12 0	46	12 23) 13 30)	7·8 8 42	10·9	8 40	1117	1104	1 30	13	1,0,0,1,1,1,0,0	4	0	86·0
4 q	20 10	552	501	10 55	51	13 21 18·1	7·2 8 59	10·9	8 40	1119	1105	12 48	14	0,0,1,0,0,1,1,1	4	0	86·0
5	4 5	549	484	18 41	65	14 7 23·6	7·0 8 42	16·6	18 50	1161	1100	4 2	61	2,2,1,2,2,2,3,2	16	1	85·9
6	21 11	564	481	11 22	83	13 42 19·6	6·8 23 37	12·8	0 1	1119	1094	12 11	25	1,0,1,1,2,1,2,3	11	1	85·9
7	19 41	587	467	21 42	120	13 15 18·6	-5·5 23 10	24·1	16 30	1113	1060	22 23	53	2,0,1,1,2,1,3,5	15	1	85·9
8	19 20	543	492	12 20	51	15 55 24·0	4·4 0 8	19·6	16 8	1133	1093	0 1	40	3,1,2,3,2,3,1,1	16	1	85·8
9	5 23	548	499	11 23	49	14 0 18·7	9·8 8 37	8·9	17 0	1116	1095	12 18	21	1,2,2,2,1,1,0,0	9	0	85·6
10 q	17 39) 22 10)	541	494	10 31	47	14 38 19·3	8·0 8 39	11·3	8 50	1118	1099	11 44	19	0,0,0,1,2,1,0,0	4	0	85·6
11 q	22 9	553	498	11 25	55	13 57 18·4	8·0 8 43	10·4	16 0	1112	1097	11 14	15	0,0,0,0,1,0,0,1	2	0	85·6
12 d	10 19	564	440	18 4	124	13 35 28·9	-2·1 13 15	31·0	14 15	1190	1057	23 55	133	0,0,2,4,3,5,4,3	21	1	85·7
13	19 55	545	470	8 34	75	11 50 18·7	4·2 23 50	14·5	16 39	1125	1058	0 1	67	2,1,3,2,1,1,2,3	15	1	85·8
14	21 53	569	494	13 36	75	14 20 18·8	-2·3 21 49	21·1	16 55	1133	1086	0 1	47	2,1,2,1,2,3,3,3	17	1	85·8
15	21 5	540	486	11 11	54	12 20 20·5	8·5 8 44	12·0	16 33	1128	1099	0 1	29	2,1,1,2,2,2,1,2	13	1	85·8
16 d	14 6	538	490	14 42	48	14 33 26·9	6·7 18 10	20·2	16 15	1155	1099	7 20	56	1,2,2,2,3,4,3,0	17	1	85·8
17	23 59	548	470	10 12	78	13 11 21·4	0·5 19 50	20·9	17 0	1135	1098	24 0	37	0,1,2,2,1,2,3,2	13	1	85·8
18	0 13	548	497	10 41	51	12 14 19·1	8·3 7 20	10·8	19 45	1125	1093	0 41	32	2,1,2,1,2,1,2,1	12	1	85·8
19	21 4	*619*	474	22 5	145	12 16 21·3	-2·5 21 37	23·8	18 40	1125	1061	24 0	64	2,0,1,2,2,2,4,5	18	1	85·8
20	20 44	561	494	0 16	67	12 23 18·7	-1·2 1 6	19·9	22 36	1113	1047	0 49	66	4,2,1,2,2,2,3,3	19	1	85·8
21	21 47	580	511	9 35	69	11 2 16·3	4·3 22 39	12·0	21 29	1113	1093	22 11	20	1,0,1,2,1,2,2,3	12	1	85·8
22	18 38	544	494	11 14	50	14 36 23·3	7·8 21 32	15·5	17 9	1137	1087	10 50	50	1,0,0,2,2,3,2,2	12	1	85·9
23	23 45	552	498	10 55	54	12 44 17·7	7·9 23 5	9·8	0 1	1113	1099	11 30	14	2,0,1,1,1,1,0,2	8	0	85·9
24 d	17 22	607	400	24 0	207	11 58 24·8	-9·1 20 40	33·9	19 28	*1212*	1018	24 0	194	3,3,3,4,5,5,5,4	32	2	86·0
25 d	14 35	556	372	0 12	184	14 15 *30·5*	*-26·3* 1 32	*56·8*	17 20	1203	980	2 14	*223*	5,5,3,3,5,4,3,2	30	2	86·0
26 q	17 3	529	489	11 12	*40*	13 59 15·2	7·1 0 47	*8·1*	0 1	1119	1111	3 40	*8*	2,1,1,2,1,1,0,1	9	0	85·9
27	5 31	533	399	23 53	134	13 19 16·1	-21·8 23 52	37·9	19 35	1143	998	23 52	145	1,0,1,1,2,3,3,5	16	1	86·0
28 d	20 21	602	*369*	0 55	*233*	12 49 20·1	-22·0 0 9	42·1	17 52	1147	*941*	1 25	206	5,4,2,3,3,4,4,4	29	2	85·8
29	21 16	567	477	10 35	90	13 14 18·7	4·3 21 55	14·4	19 38	1125	1105	11 0	20	2,1,2,2,2,2,2,3	16	1	85·8
30	17 15	540	477	13 9	63	12 35 18·7	7·2 17 4	11·5	13 53	1128	1105	10 40	23	2,0,1,1,3,2,1,1	11	1	85·7
31	22 0	560	504	10 34	56	12 59 16·5	7·7 23 27	8·8	18 53	1114	1100	23 0	14	1,1,0,1,2,2,1,3	11	0	85·7
Mean	- -	557	474	- -	83	- - 20·4	1·6 - -	18·8	- -	1133	1077	- -	56	-	14·1	0·84	85·8

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

142 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	528	526	524	528	528	529	530	532	528	520	520	520	523	526	527	528	530	535	533	534	535	531	535	531	528
2 q	528	528	526	528	531	532	531	529	524	517	513	516	522	526	525	524	528	529	531	530	530	535	533	533	527
3	532	532	532	532	533	532	532	530	525	518	517	518	520	521	527	531	532	536	535	536	536	535	540	539	530
4	544	537	536	535	537	540	540	538	535	528	524	524	528	544	538	535	539	542	548	547	540	524	536	527	536
5	540	516	531	524	524	526	531	531	524	513	500	493	497	506	507	516	524	527	529	531	533	536	532	532	522
6 q	531	531	531	532	536	536	540	537	530	519	507	504	509	517	525	526	530	535	537	536	535	535	535	534	529
7	535	535	535	537	540	542	541	543	539	527	517	516	523	531	535	537	535	536	535	539	539	540	539	539	535
8	538	537	539	539	540	540	542	541	535	526	521	526	535	536	544	535	531	500	493	497	507	507	516	519	527
9 d	518	511	503	533	525	528	488	505	497	445	442	463	493	504	501	495	487	489	493	504	509	513	512	521	*499*
10	518	512	504	513	525	523	507	523	516	499	493	501	506	516	516	519	522	523	526	525	523	519	528	526	516
11 d	523	525	527	546	539	519	521	511	516	498	488	486	488	499	502	508	511	507	500	503	519	530	528	525	513
12 d	520	511	519	520	536	526	536	535	524	503	499	515	514	514	516	510	518	523	527	527	529	515	523	523	520
13	521	522	523	527	525	511	533	532	521	519	515	507	506	504	508	515	506	514	527	526	523	522	516	535	519
14	526	523	520	522	527	530	533	529	523	510	492	488	499	505	508	508	512	510	508	515	524	523	527	527	516
15	527	519	519	523	527	532	528	531	532	528	520	512	522	525	530	535	544	532	518	525	535	531	534	525	527
16 d	520	523	531	528	530	533	536	531	526	519	516	507	510	512	523	530	525	514	520	516	526	537	571	523	525
17	510	507	517	520	521	526	527	527	528	514	515	509	511	526	524	526	527	531	533	533	534	534	534	534	524
18	532	531	530	530	530	534	535	534	529	526	522	519	526	529	528	527	532	535	536	536	539	534	532	532	531
19	534	532	535	538	538	538	535	535	534	533	532	530	531	530	532	532	535	536	538	535	532	530	532	530	534
20	532	533	534	531	529	531	534	535	534	528	526	527	527	531	531	533	534	535	535	536	536	536	535	533	532
21	532	532	535	535	537	539	535	535	533	528	528	532	538	543	541	538	537	537	542	541	541	542	533	527	536
22	526	527	524	536	538	539	540	539	537	528	526	526	527	528	530	534	539	539	539	539	538	538	537	537	534
23	535	535	535	538	538	538	537	535	531	527	523	524	530	535	536	536	528	523	523	530	537	539	538	535	533
24 q	534	534	535	538	540	542	543	542	537	530	528	526	528	527	530	530	533	538	537	537	536	534	538	535	535
25	539	537	537	539	542	543	543	542	539	531	530	533	537	536	531	529	527	528	530	530	522	530	534	531	534
26 q	533	531	533	534	534	534	537	538	534	529	526	526	530	534	534	535	535	538	539	540	539	536	531	531	534
27	531	531	533	535	534	539	542	541	540	540	538	535	534	539	542	543	544	546	545	544	546	549	545	544	540
28	540	538	538	538	537	541	547	547	549	545	535	538	541	545	545	545	544	545	546	539	539	532	529	534	*541*
29 d	531	530	529	533	537	538	545	545	538	528	530	533	533	526	520	526	533	532	522	514	513	516	523	528	529
30	525	530	524	526	533	536	535	532	530	522	519	522	525	530	531	532	534	536	535	534	534	533	531	533	530
Mean	529	527	528	531	533	533	533	*533*	530	520	*515*	516	520	525	526	527	529	528	529	529	531	531	533	531	528

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

143 ESKDALEMUIR (D) — 12° + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	9·9	10·4	10·5	10·6	10·1	10·1	10·1	10·1	9·7	10·4	12·9	14·8	15·4	14·9	13·7	12·6	13·0	13·0	12·5	12·5	12·4	12·0	12·1	10·9	11·9
2 q	9·9	10·3	10·5	9·9	9·9	10·1	10·1	10·3	9·9	10·1	12·3	15·0	15·5	14·5	13·7	13·1	13·3	13·2	12·3	9·7	11·6	11·7	11·7	11·8	11·7
3	12·1	11·9	11·5	11·3	10·5	10·4	10·8	10·1	9·7	9·6	11·6	14·3	15·8	15·5	15·1	14·1	13·5	13·2	12·5	12·4	11·7	11·5	11·1	9·0	12·1
4	10·7	10·6	10·2	10·6	10·6	10·5	10·5	10·3	9·9	9·9	12·2	14·3	15·7	17·6	16·6	16·2	15·2	14·5	14·7	14·2	12·9	8·3	10·3	9·7	12·3
5	4·9	5·1	6·6	5·4	6·2	7·7	9·0	9·4	8·9	9·8	12·2	15·8	16·2	16·1	16·7	15·3	14·1	13·3	12·5	11·7	11·4	11·0	10·6	10·6	10·9
6 q	10·9	11·2	11·3	11·4	11·4	10·9	10·6	10·4	9·7	9·3	10·6	12·6	14·3	14·8	14·4	13·2	12·6	12·4	12·3	11·8	11·5	11·1	10·0	11·3	11·7
7	11·4	11·5	11·6	11·6	11·7	11·4	10·5	10·3	9·7	9·2	10·6	13·4	14·1	14·4	13·7	13·3	13·1	13·1	11·6	11·8	10·7	10·6	10·7	11·4	11·7
8	11·5	11·7	11·5	11·6	11·5	11·5	10·9	10·5	9·2	9·5	10·6	13·3	16·3	15·8	16·5	15·8	15·5	11·9	13·3	2·7	−2·3	0·8	5·9	4·6	*10·4*
9 d	7·0	5·2	11·1	10·8	8·3	9·3	24·8	30·6	15·7	12·6	22·6	19·6	18·8	16·1	13·8	15·4	4·9	11·1	11·5	1·7	2·5	5·9	8·4	9·3	12·4
10	5·1	6·3	11·9	14·9	10·0	10·8	14·7	15·2	11·9	11·0	11·9	12·4	15·5	14·5	14·2	12·8	12·2	11·5	12·1	11·8	11·2	9·3	7·0	10·1	11·6
11 d	9·7	10·0	12·1	13·8	15·4	18·7	19·6	16·3	15·2	13·4	14·1	14·4	12·6	17·0	14·2	10·5	11·5	9·9	6·3	7·5	9·8	10·1	10·4	10·1	*12·6*
12 d	7·9	14·3	9·3	7·9	9·8	13·8	13·3	13·6	12·3	12·2	11·9	12·6	14·3	14·8	14·0	13·2	11·7	12·4	12·7	5·2	4·1	9·0	8·2	8·3	11·1
13	10·7	11·9	11·5	10·5	10·8	11·7	14·3	11·7	10·3	9·4	9·6	12·8	13·4	14·2	13·1	12·3	11·1	10·6	8·8	11·7	9·8	7·9	8·5	8·4	11·0
14	9·9	9·6	10·5	10·7	9·9	10·7	10·6	11·0	10·0	9·8	12·0	15·1	16·6	15·8	15·3	14·5	14·2	15·3	14·5	12·1	9·1	9·0	9·9	10·1	11·9
15	9·7	8·9	10·1	9·0	10·3	10·1	11·1	12·0	11·4	11·2	12·3	13·3	15·1	15·4	15·3	15·3	15·1	17·2	16·6	15·7	13·7	12·4	10·4	9·7	12·6
16 d	8·4	8·9	9·1	9·6	9·9	10·6	10·0	10·1	10·1	10·0	13·1	13·0	16·0	17·7	13·2	14·1	15·1	10·8	6·1	9·7	10·7	9·9	11·5	9·7	11·1
17	4·9	10·7	10·6	10·4	9·3	9·7	9·6	10·6	12·2	13·1	12·6	16·0	13·2	14·2	14·0	13·3	12·4	11·9	11·9	11·4	10·7	10·6	10·6	10·8	11·4
18	11·1	11·4	11·5	10·8	10·9	10·4	10·1	10·1	10·5	11·4	12·3	13·4	14·8	14·3	14·2	13·4	13·1	12·1	11·6	11·2	11·1	10·9	10·8	10·8	11·8
19	11·3	11·5	11·9	11·7	11·5	11·0	10·6	10·6	10·7	10·6	11·7	13·2	13·9	14·2	14·1	13·6	13·5	12·3	11·8	11·7	10·9	10·5	9·9	10·6	11·8
20	11·3	11·4	11·6	11·4	10·8	10·7	9·9	10·3	10·0	10·1	11·6	13·5	13·3	13·2	12·7	12·4	12·1	11·7	10·9	10·7	10·6	10·1	9·6	9·3	11·2
21	10·1	10·1	10·8	11·1	10·7	10·6	10·6	10·7	10·6	10·7	11·9	13·3	13·4	13·3	12·9	12·9	13·1	13·3	12·6	12·3	10·7	9·6	7·9	7·2	11·3
22	8·1	8·1	11·3	11·4	10·1	10·4	10·7	10·5	10·1	10·0	11·4	13·4	14·0	13·7	13·3	13·1	12·8	12·3	12·3	11·9	11·5	10·6	10·4	10·6	11·3
23	10·4	10·6	10·8	11·1	10·7	10·6	10·7	10·8	10·5	10·4	11·5	13·6	15·2	15·1	13·6	13·7	12·9	11·5	11·3	11·4	10·7	10·4	10·4	10·3	11·6
24 q	10·4	10·6	10·8	10·9	10·7	10·7	9·9	9·8	9·8	10·3	11·7	13·3	14·6	14·3	13·7	12·7	12·3	11·9	11·7	11·5	11·4	10·6	10·0	9·5	11·4
25	9·7	9·9	10·4	10·6	10·9	10·8	10·6	10·6	10·4	9·9	11·2	13·3	14·0	14·1	13·4	13·3	14·2	13·5	12·3	12·4	9·5	9·5	10·0	9·7	11·4
26 q	10·0	10·6	10·5	10·7	10·6	10·7	10·7	10·6	10·5	10·5	11·9	14·1	14·7	14·6	13·4	13·7	12·6	12·2	11·5	11·4	10·9	9·7	10·0	9·7	11·5
27	9·8	10·1	10·7	10·5	10·1	10·4	9·5	9·8	10·5	11·1	11·7	13·4	14·3	14·3	13·2	13·1	12·5	12·3	12·3	12·2	12·2	11·9	11·3	10·7	11·6
28	10·2	10·1	10·3	9·9	10·1	10·5	9·8	9·8	10·4	10·7	11·4	13·1	13·3	13·3	12·6	12·4	12·2	11·7	12·3	12·9	12·6	11·5	8·9	8·9	11·2
29 d	9·6	8·6	7·8	8·7	9·7	9·3	9·0	10·6	10·8	13·3	14·9	14·7	15·2	14·9	14·9	13·0	12·5	12·4	12·4	4·3	3·4	9·3	9·3	10·3	10·8
30	9·7	10·5	10·7	11·3	10·8	10·6	10·5	10·0	9·7	9·8	11·1	12·9	13·9	13·5	12·8	12·4	12·1	11·7	11·4	11·0	10·5	9·9	9·9	10·7	11·1
Mean	*9·5*	10·1	10·6	10·7	10·4	10·8	11·4	11·6	10·7	10·6	12·3	13·9	14·8	*14·9*	14·1	13·5	12·8	12·5	11·9	10·9	9·9	9·9	9·9	9·8	11·6

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT
Mean values for periods of sixty minutes ending at exact hours, G.M.T.

144 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — NOVEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1107	1109	1111	1112	1111	1109	1107	1107	1106	1106	1106	1105	1107	1111	1113	1112	1110	1110	1110	1110	1111	1113	1113	1112	1109
2 q	1112	1112	1112	1112	1111	1108	1107	1107	1108	1108	1106	1101	1106	1111	1112	1112	1111	1111	1112	1112	1111	1111	1110	1111	1110
3	1110	1111	1110	1110	1108	1108	1107	1106	1106	1105	1101	1100	1104	1110	1111	1111	1108	1107	1107	1106	1107	1108	1109	1105	1107
4	1100	1100	1101	1103	1105	1105	1102	1102	1103	1100	1094	1094	1099	1099	1105	1106	1105	1105	1101	1103	1107	1118	1113	1111	*1103*
5	1101	1100	1082	1084	1093	1099	1101	1104	1107	1109	1110	1112	1116	1116	1120	1118	1115	1113	1112	1112	1112	1112	1112	1112	1107
6 q	1111	1111	1110	1108	1107	1106	1106	1105	1106	1108	1107	1106	1105	1110	1111	1113	1112	1111	1109	1108	1108	1110	1110	1110	1109
7	1111	1111	1111	1111	1108	1107	1106	1103	1106	1106	1101	1102	1107	1108	1111	1111	1109	1108	1110	1108	1107	1107	1107	1106	1108
8	1106	1106	1106	1106	1106	1105	1104	1102	1105	1106	1102	1096	1095	1099	1102	1107	1114	1131	1156	1165	1130	1102	1105	1102	1111
9 d	1100	1099	1084	1068	1093	1099	1092	1069	1088	1110	1122	1135	1133	1136	1137	1140	1161	1155	1152	1141	1119	1117	1113	1092	1115
10	1081	1092	1095	1085	1097	1101	1105	1101	1105	1110	1109	1107	1110	1115	1119	1119	1119	1118	1117	1114	1114	1117	1114	1110	1107
11 d	1107	1107	1104	1088	1084	1087	1088	1095	1103	1113	1117	1122	1135	1135	1140	1146	1137	1135	1132	1127	1119	1113	1113	1113	1115
12 d	1109	1092	1082	1090	1094	1089	1084	1089	1098	1106	1110	1108	1108	1110	1114	1119	1121	1118	1117	1123	1114	1113	1111	1106	1105
13	1105	1102	1103	1107	1107	1106	1100	1103	1111	1113	1112	1113	1114	1118	1123	1125	1130	1130	1125	1122	1119	1121	1118	1110	1114
14	1102	1106	1109	1111	1111	1110	1107	1108	1112	1113	1112	1109	1110	1116	1118	1122	1124	1129	1131	1130	1126	1123	1118	1116	*1116*
15	1112	1111	1110	1110	1110	1109	1109	1109	1112	1113	1111	1111	1111	1112	1113	1109	1108	1114	1130	1130	1129	1129	1125	1123	1115
16 d	1120	1117	1111	1111	1110	1109	1108	1107	1107	1107	1104	1105	1107	1111	1117	1115	1117	1127	1130	1124	1120	1116	1093	1076	1111
17	1092	1093	1099	1106	1108	1108	1106	1105	1105	1105	1107	1111	1114	1114	1117	1117	1114	1113	1111	1111	1112	1112	1112	1112	1109
18	1112	1112	1112	1111	1109	1108	1107	1106	1107	1107	1108	1111	1112	1112	1113	1113	1112	1112	1111	1111	1108	1111	1111	1111	1110
19	1111	1111	1109	1107	1107	1107	1106	1105	1104	1106	1103	1106	1109	1112	1112	1112	1112	1111	1109	1110	1111	1112	1112	1112	1109
20	1111	1110	1108	1108	1108	1108	1107	1107	1108	1106	1105	1106	1107	1111	1113	1112	1111	1111	1111	1110	1109	1109	1109	1111	1109
21	1111	1111	1110	1108	1108	1107	1106	1105	1106	1107	1103	1101	1101	1104	1106	1110	1111	1109	1108	1107	1107	1107	1107	1107	1107
22	1107	1106	1106	1101	1101	1102	1103	1103	1102	1105	1102	1100	1105	1108	1110	1111	1111	1111	1110	1108	1108	1108	1108	1107	1106
23	1107	1107	1107	1107	1106	1106	1106	1105	1104	1101	1100	1100	1103	1106	1108	1110	1111	1114	1114	1112	1109	1110	1108	1106	1107
24 q	1107	1106	1106	1106	1106	1105	1105	1104	1100	1100	1102	1106	1107	1111	1111	1111	1109	1107	1107	1107	1107	1106	1105	1106	
25	1103	1102	1104	1105	1105	1105	1105	1103	1102	1100	1095	1095	1099	1103	1107	1108	1111	1112	1113	1112	1117	1116	1111	1109	1106
26 q	1109	1108	1107	1106	1106	1106	1106	1106	1106	1105	1100	1098	1100	1103	1105	1106	1107	1107	1107	1106	1106	1109	1110	1109	1106
27	1108	1107	1106	1106	1106	1105	1105	1102	1100	1099	1099	1100	1102	1101	1104	1105	1105	1105	1106	1106	1105	1106	1107	1106	1104
28	1106	1106	1106	1105	1104	1102	1101	1100	1100	1100	1100	1100	1100	1101	1101	1103	1105	1106	1105	1106	1110	1112	1112	1110	1104
29 d	1107	1107	1106	1105	1104	1102	1101	1101	1100	1100	1096	1101	1107	1110	1114	1114	1113	1114	1118	1125	1123	1117	1115	1112	1109
30	1110	1106	1106	1106	1106	1105	1106	1106	1106	1106	1106	1106	1107	1108	1108	1111	1111	1111	1110	1110	1109	1110	1109	1108	1108
Mean	1107	1106	1104	1103	1105	1104	1103	*1103*	1105	1106	1105	1105	1108	1111	1113	1114	1115	1116	*1116*	1116	1113	1113	1111	1108	1109

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

145 ESKDALEMUIR — NOVEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS												3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination			Vertical force							
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +	Minimum 12° +	Range	Maximum 44,000γ +		Minimum 44,000γ +		Range			
	h. m.	γ	γ	h. m.	γ	h. m. ′	′ h. m.	′	h. m.	γ	γ	h. m.	γ			°A.
1 q	22 57	542	517	10 37	25	12 40 15·9	8·9 23 47	7·0	22 23	1114	1102	11 31	12	1,0,1,1,1,1,1,2	8	0	85·7
2 q	19 15	536	512	10 43	24	12 10 16·2	8·3 19 9	7·9	14 50	1114	1100	11 35	14	1,0,0,1,1,1,2,0	6	0	85·8
3	22 58	562	513	9 28	49	12 40 16·1	8·0 23 11	8·1	14 50	1112	1099	11 50	13	0,0,0,1,0,0,0,2	3	0	85·8
4	13 9	559	520	21 27	39	13 5 19·4	7·0 21 15	12·4	21 32	1123	1093	11 0	30	2,0,0,0,3,1,2,3	11	1	85·8
5	0 11	551	489	11 20	62	13 42 18·0	1·4 3 0	16·6	14 50	1123	1075	2 40	48	3,2,1,2,1,1,1,0	11	1	85·9
6 q	7 1	543	500	10 50	43	13 58 15·1	8·8 9 10	6·3	15 10	1114	1103	12 15	11	0,0,0,1,1,1,1,0	4	0	85·8
7	7 30	544	512	10 50	32	13 5 14·9	8·9 9 35	6·0	14 40	1113	1100	10 50	13	0,0,0,1,2,1,1,1	6	0	85·6
8	14 30	552	477	18 53	75	18 17 18·2	-7·6 20 50	25·8	19 2	1173	1095	12 20	78	0,0,0,1,2,3,5,3	14	1	85·6
9 d	7 40	557	*402*	9 50	*155*	7 16 *38·6*	-5·5 19 22	*44·1*	16 36	*1175*	*1052*	3 10	*123*	4,3,5,4,3,4,4,3	30	2	85·5
10	22 39	539	484	10 30	55	6 48 17·8	3·3 0 53	14·5	14 21	1122	1077	0 37	45	4,3,3,2,2,1,0,2	17	1	85·5
11 d	3 18	551	476	12 31	75	6 27 21·7	-1·9 18 54	23·6	15 18	1149	1081	4 25	68	2,3,3,2,3,2,4,0	19	1	85·6
12 d	20 4	563	488	9 54	75	1 24 17·4	-4·8 19 47	22·2	19 47	1128	1071	1 55	57	3,3,2,3,1,2,4,2	20	1	85·6
13	23 43	546	496	13 19	50	6 37 15·9	5·5 18 11	10·4	17 10	1131	1099	6 40	32	1,2,2,1,1,2,2,3	14	1	85·6
14	6 28	534	484	11 30	50	12 30 16·9	8·1 20 30	8·8	18 20	1133	1099	0 20	34	1,1,1,2,1,1,3,1	11	1	85·6
15	17 2	555	504	11 37	51	17 47 18·1	8·0 1 25	10·1	19 3	1135	1107	2 50 / 16 33	28	2,1,2,2,1,3,2,2	15	1	85·5
16 d	22 21	*624*	496	11 18	128	13 20 18·8	2·6 22 15	16·2	18 13	1135	1071	23 11	64	2,1,1,2,2,3,3,5	19	1	85·5
17	23 12	538	483	12 7	55	11 22 16·8	2·9 0 19	13·9	13 45	1118	1089	0 1	29	3,1,2,2,3,0,0,0	11	1	85·4
18	20 18	543	518	11 23	25	12 25 15·2	9·6 5 55	5·6	15 50	1114	1105	7 45	9	0,1,1,0,1,1,1,0	5	0	85·3
19	18 56	542	527	13 25	*15*	13 50 15·2	9·5 22 28	5·7	13 55	1114	1102	10 50	12	1,0,1,1,1,1,1,0	6	0	85·1
20	22 40	543	523	10 25	20	11 55 14·2	8·7 23 35	*5·5*	14 40	1114	1105	10 0	9	0,1,1,1,0,0,0,1	4	0	85·1
21	19 0	547	519	23 46	28	13 22 14·2	6·1 23 39	8·1	0 1	1112	1100	11 40	12	1,0,0,1,1,1,1,2	7	0	85·0
22	5 42	544	519	2 35	25	12 27 14·3	7·5 0 1	6·8	16 10	1112	1099	3 20	13	2,2,0,0,0,0,0,0	4	0	84·9
23	14 59	542	518	17 52	24	12 45 16·1	9·8 9 9	6·3	18 3	1117	1099	11 20	18	0,0,0,1,1,2,2,0	6	0	84·9
24 q	6 10	546	525	11 0	21	12 33 15·1	8·9 23 18	6·2	16 0	1113	1099	10 33	14	0,1,0,0,0,0,0,1	2	0	84·9
25	0 3	544	508	20 48	36	16 23 15·1	6·5 20 53	8·6	21 0	1121	1094	10 50	27	1,0,0,1,1,1,2,1	7	0	84·9
26 q	20 1	542	524	11 47	18	13 0 15·1	8·9 21 37	6·2	0 1	1111	1097	11 13	14	0,0,1,0,0,1,0,0	2	0	84·7
27	21 53	557	528	1 8	29	12 31 15·0	9·0 6 18	6·0	1 10	1109	1097	10 10	12	1,0,1,0,0,0,1,1	4	0	84·6
28	18 58	553	526	21 28	27	11 52 14·1	7·3 23 9	6·8	22 18	1113	1099	7 55	14	0,1,2,0,0,1,2,2	8	0	84·6
29 d	6 48	593	491	19 44	102	12 25 16·0	-6·6 19 52	22·6	19 49	1135	1094	10 26	41	2,1,2,2,2,1,4,2	16	1	84·7
30	5 6	538	518	10 45	20	12 12 14·4	8·9 0 21 1 0	*5·5*	0 1	1112	1105	1 20	7	1,1,0,1,1,0,0,1	5	0	84·7
Mean	- -	551	503	- -	48	- - 17·0	5·2 - -	11·8	- -	1124	1094	- -	30	-	9·8	0·47	85·3

q denotes an international quiet day and d an international disturbed day.

TERRESTRIAL MAGNETIC FORCE: HORIZONTAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

146 ESKDALEMUIR (H) — 16,000γ (0·16 C.G.S. unit) + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	534	533	532	532	537	538	539	538	535	531	528	529	534	538	538	537	537	538	537	537	536	535	535	536	535
2	535	535	535	536	537	542	543	542	541	542	545	546	545	545	541	538	538	540	542	541	539	538	522	529	*539*
3 q	530	533	534	534	536	536	536	534	535	537	536	538	540	538	534	534	534	536	535	536	534	534	530	529	535
4 q	528	531	533	535	537	537	536	535	534	532	530	530	533	535	537	538	541	542	543	543	542	542	541	539	536
5	538	538	541	541	542	542	541	539	538	536	536	535	535	540	540	540	545	550	553	540	526	525	522	516	537
6	530	526	530	538	544	543	543	538	537	532	525	522	518	504	498	502	514	514	513	522	520	519	523	525	524
7	535	530	527	526	535	541	542	537	531	538	530	529	529	530	532	531	531	533	533	537	539	533	515	519	532
8	515	518	526	533	534	542	558	542	539	531	524	517	517	510	510	523	529	526	525	522	530	538	535	527	528
9	529	522	538	533	535	535	540	537	522	520	524	524	523	520	526	502	517	526	533	530	530	527	530	544	528
10	532	531	531	530	537	537	538	543	539	537	532	532	530	532	530	529	531	533	534	536	536	536	533	533	534
11 q	533	537	533	533	537	541	542	542	534	532	526	524	523	522	524	526	530	530	532	534	532	533	533	533	532
12	530	532	533	535	537	540	541	537	537	533	524	521	519	530	530	533	533	536	537	534	530	529	533	531	532
13	530	530	533	534	537	541	543	542	542	541	539	535	537	529	540	546	553	539	526	519	501	471	496	456	527
14 d	428	391	452	470	533	531	502	423	453	415	414	437	439	477	499	498	501	501	501	498	498	495	495	494	*473*
15	495	495	494	497	504	510	505	514	512	506	505	503	497	515	515	513	506	512	504	505	510	507	485	504	505
16	510	507	513	510	513	518	517	516	515	514	512	510	514	521	522	523	524	524	524	526	529	525	514	515	517
17	517	513	519	526	531	535	537	537	529	510	511	512	511	496	497	490	506	511	517	515	512	513	517	518	516
18	523	518	521	522	523	524	523	522	522	526	527	526	528	523	521	522	516	514	514	517	520	526	524	524	522
19	521	523	527	524	525	526	528	526	523	530	525	522	518	518	518	517	514	530	543	538	505	544	539	534	526
20 d	497	503	502	507	504	504	509	525	526	529	535	534	535	530	529	532	524	526	527	514	485	481	484	508	515
21	486	487	482	509	532	529	530	515	514	519	513	506	506	508	515	521	525	526	527	526	527	525	525	516	515
22 q	516	519	520	521	521	522	523	521	522	522	522	524	525	528	529	532	533	534	535	536	534	534	532	526	526
23	528	525	529	530	533	533	536	537	536	536	535	535	534	537	537	541	555	541	543	537	534	531	510	521	534
24	509	507	514	517	521	525	529	526	526	536	532	524	510	499	517	534	533	531	528	526	528	528	528	527	523
25 d	525	525	526	529	531	532	533	534	543	536	532	519	529	543	530	534	472	489	491	508	527	508	525	516	522
26 d	505	509	504	511	518	519	518	535	528	509	500	492	495	516	523	516	508	502	512	512	527	519	527	520	514
27 d	520	508	511	526	527	515	521	532	520	522	520	509	477	503	523	526	508	515	496	535	514	513	527	536	517
28	520	531	522	522	520	531	527	532	518	521	513	500	513	496	482	482	520	519	529	521	518	540	552	504	518
29	521	520	520	519	530	531	532	527	522	523	511	512	513	512	518	525	516	524	534	531	529	515	520	523	522
30	524	524	523	520	531	536	536	538	531	523	520	522	527	520	524	527	527	527	529	523	525	529	527	525	527
31	532	529	529	533	533	538	539	535	536	535	533	527	529	523	525	532	535	536	538	539	540	541	540	533	*534*
Mean	519	*517*	521	524	529	531	*532*	529	527	524	521	519	519	521	523	524	524	526	527	527	524	524	523	521	524

530 at 0-1h. January 1, 1946.

MAGNETIC DECLINATION (WEST)

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

147 ESKDALEMUIR (D) — 12° + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1 q	11·3	11·6	12·3	11·7	10·7	10·2	10·0	9·9	9·9	10·4	11·5	12·9	13·5	13·3	12·8	12·7	12·6	11·8	11·7	11·7	10·6	10·5	10·0	10·5	11·4
2	10·5	10·6	10·8	11·2	11·5	10·5	10·1	9·9	10·1	11·5	12·5	13·2	13·2	13·3	12·6	12·4	12·3	12·1	11·9	11·5	10·8	10·9	9·7	4·5	11·1
3 q	9·1	10·0	10·3	10·1	9·9	10·1	10·4	10·0	10·4	10·9	11·7	13·2	13·1	12·3	12·1	12·1	12·3	12·3	11·3	10·7	10·6	9·6	9·6	9·0	10·9
4 q	9·7	9·9	10·5	10·6	10·6	10·5	10·5	10·0	10·4	10·6	11·3	12·4	13·3	13·2	12·4	11·8	11·6	11·2	11·1	10·6	10·5	10·2	10·4	10·6	11·0
5	11·0	11·3	11·5	11·5	11·7	11·0	9·9	9·8	9·9	10·6	11·6	12·5	13·1	13·5	13·5	13·4	13·2	12·8	12·4	11·4	6·0	6·1	6·8	6·2	10·9
6	7·7	8·0	11·5	11·5	10·1	10·0	9·7	9·8	10·1	12·2	12·5	13·3	15·0	17·3	15·1	14·0	13·6	11·8	11·1	10·7	5·0	4·9	8·5	7·9	10·9
7	5·9	7·0	7·7	10·5	9·9	10·2	11·4	11·4	10·6	10·1	10·4	12·9	13·2	12·6	12·2	11·7	10·8	11·2	10·8	10·7	10·4	9·9	7·5	3·2	10·1
8	5·2	8·1	9·8	10·6	12·5	15·1	8·8	10·1	10·5	10·8	12·2	13·3	13·4	13·3	9·4	12·4	12·3	11·5	10·9	10·7	9·8	8·1	8·9	8·6	10·7
9	5·2	9·7	11·3	9·9	10·1	10·8	10·7	11·3	10·5	11·6	12·5	13·9	13·3	12·6	13·3	10·7	11·1	12·3	10·6	10·7	7·9	8·1	7·8	7·0	10·5
10	8·7	9·8	9·8	12·1	12·1	12·1	11·7	11·2	11·1	11·4	11·0	12·0	12·4	12·6	12·3	12·7	11·5	11·4	10·6	10·0	9·7	9·6	9·6	9·6	11·0
11 q	10·1	10·2	9·8	10·5	10·3	10·5	10·6	10·0	9·8	9·8	10·6	12·0	12·9	13·3	13·3	12·3	11·4	11·1	10·3	9·9	9·7	9·3	9·7	9·6	10·7
12	9·7	10·0	10·1	10·5	10·5	10·4	10·1	10·1	9·8	9·8	11·0	12·3	12·9	13·7	13·1	12·2	11·8	10·7	10·6	10·6	8·8	10·0	9·2	9·7	10·7
13	9·6	10·0	10·6	10·5	10·4	10·4	10·0	10·1	10·4	10·5	11·0	12·0	13·3	15·3	15·6	16·0	19·4	21·6	19·8	15·1	5·2	−2·3	−2·5	−6·4	10·7
14 d	−2·0	−2·3	−14·1	−19·1	−21·3	7·0	22·1	22·8	15·1	12·0	22·3	13·9	17·8	25·7	18·7	19·7	13·5	10·7	11·0	10·6	9·9	9·4	8·8	8·8	9·2
15	8·9	8·6	8·5	9·1	9·8	9·4	10·0	10·7	11·1	11·0	10·2	10·9	11·0	12·8	12·4	11·2	9·8	10·1	11·3	9·4	9·4	8·6	3·1	8·8	9·8
16	9·3	10·1	9·3	9·2	9·0	9·2	9·1	9·4	9·8	10·0	10·2	11·1	11·4	11·9	11·6	11·1	10·7	10·3	10·1	9·9	9·7	9·9	8·1	7·5	9·9
17	12·3	9·2	5·0	7·9	8·9	12·1	11·1	11·2	10·6	10·3	12·2	12·9	13·6	13·8	15·9	15·7	13·5	11·9	11·5	10·5	9·3	7·5	8·4	6·8	10·9
18	7·7	10·2	10·9	10·7	10·4	10·5	9·8	9·7	10·1	10·3	12·1	12·1	12·8	12·0	11·2	11·1	11·7	12·1	10·7	9·8	8·8	8·3	8·9	9·4	10·5
19	8·7	9·8	10·1	10·2	10·2	10·0	9·6	9·4	10·3	12·2	11·9	12·6	12·0	12·4	11·9	12·6	11·6	11·1	10·9	11·8	10·6	10·6	2·5	−4·0	10·0
20 d	3·6	4·9	10·5	8·7	10·0	9·5	6·3	7·0	8·0	10·8	11·4	12·4	12·9	12·8	11·7	14·9	18·3	17·8	19·3	14·2	7·5	5·0	5·0	2·0	10·2
21	3·2	−0·3	−2·1	2·5	4·6	11·7	16·0	15·5	14·9	14·2	13·8	13·1	14·0	14·3	13·5	11·9	11·6	10·6	10·1	9·7	9·1	8·9	8·5	8·8	9·9
22 q	8·8	9·4	9·4	9·5	9·5	9·3	9·5	9·3	9·5	10·4	10·8	12·1	12·4	12·3	11·6	11·3	11·4	10·6	10·3	9·9	9·9	9·7	9·0	9·1	10·2
23	8·1	9·0	9·5	9·5	9·9	9·8	9·7	9·6	9·7	10·1	11·4	12·3	12·4	12·4	11·9	12·1	12·6	14·2	14·0	16·3	13·7	16·2	10·6	11·6	*11·5*
24	9·3	8·9	9·8	9·7	10·1	10·1	10·2	9·5	9·2	10·0	10·5	10·9	14·5	12·4	12·9	11·6	11·0	9·8	9·5	8·9	8·4	8·7	9·0	9·7	10·2
25 d	10·0	10·1	10·2	10·5	10·4	10·1	9·8	9·8	10·6	11·1	12·6	14·0	13·8	13·1	11·4	12·9	3·6	1·6	6·0	5·1	9·9	7·3	7·6	7·5	9·5
26 d	6·1	10·8	3·9	4·9	5·5	6·5	10·8	11·6	11·3	11·2	10·8	14·7	11·7	12·4	11·9	9·7	8·7	6·5	4·9	3·1	2·9	7·9	5·9	7·6	*8·4*
27 d	6·6	8·5	12·9	11·6	9·0	9·1	10·1	10·8	9·7	9·7	11·9	12·6	13·0	14·0	10·7	12·2	9·7	10·0	−4·0	−8·9	9·0	8·4	7·7	8·0	8·8
28	12·9	14·3	11·5	8·0	9·3	11·0	10·5	10·1	11·0	11·5	14·0	13·1	13·9	10·6	7·1	9·3	12·4	10·5	7·0	4·9	6·4	3·8	6·1	6·6	9·8
29	9·1	10·3	10·5	9·6	14·7	9·8	10·4	10·1	9·8	10·3	10·2	10·4	11·2	12·0	11·6	11·7	10·4	9·2	8·3	8·3	10·0	4·3	7·7	8·5	9·9
30	12·8	10·2	9·6	10·3	9·8	9·6	10·3	11·1	10·3	9·9	10·7	10·9	11·3	10·7	10·5	10·6	10·5	10·5	9·9	10·5	8·7	9·0	9·1	9·1	10·2
31	9·0	9·1	8·9	9·5	11·2	10·4	10·0	10·0	10·6	10·6	12·1	12·1	12·4	14·1	12·8	12·5	12·0	11·6	10·6	10·2	9·8	9·3	9·3	9·3	10·7
Mean	8·3	8·9	8·7	8·8	9·1	10·2	10·6	10·7	10·5	10·8	11·9	12·5	13·1	*13·4*	12·5	12·5	11·8	11·3	10·5	9·6	9·0	8·3	7·8	*7·3*	10·3

9·4 at 0-1h. January 1, 1946.

TERRESTRIAL MAGNETIC FORCE: VERTICAL COMPONENT

Mean values for periods of sixty minutes ending at exact hours, G.M.T.

148 ESKDALEMUIR (V) — 44,000γ (0·44 C.G.S. unit) + — DECEMBER 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 q	1107	1106	1106	1105	1106	1106	1106	1105	1105	1105	1105	1105	1106	1107	1107	1106	1106	1106	1106	1106	1106	1107	1107	1107	1106
2	1107	1106	1106	1106	1104	1104	1102	1100	1100	1099	1099	1099	1098	1099	1101	1101	1103	1105	1105	1106	1106	1108	1113	1116	1104
3 q	1110	1107	1106	1106	1106	1105	1105	1104	1101	1100	1100	1100	1101	1105	1106	1107	1107	1107	1107	1106	1107	1108	1110	1110	1105
4 q	1110	1108	1107	1106	1106	1105	1105	1103	1103	1105	1105	1105	1105	1107	1107	1108	1107	1106	1105	1105	1105	1104	1105	1105	1106
5	1104	1102	1101	1101	1101	1101	1101	1102	1101	1100	1099	1099	1100	1101	1104	1104	1103	1101	1101	1106	1117	1117	1111	1110	1104
6	1100	1099	1100	1101	1102	1102	1101	1100	1100	1100	1101	1104	1107	1113	1120	1128	1129	1129	1127	1122	1121	1117	1111	1106	1110
7	1099	1099	1100	1100	1100	1100	1099	1099	1101	1102	1101	1100	1102	1106	1107	1109	1111	1110	1108	1106	1105	1107	1113	1113	1104
8	1112	1108	1107	1105	1103	1087	1083	1086	1088	1094	1094	1099	1106	1113	1125	1120	1117	1117	1119	1122	1119	1113	1110	1111	1107
9	1108	1107	1094	1100	1101	1105	1104	1102	1104	1105	1104	1102	1104	1111	1112	1123	1123	1119	1114	1113	1113	1112	1109	1104	1108
10	1101	1102	1105	1105	1101	1102	1102	1101	1100	1101	1102	1102	1103	1106	1108	1109	1111	1111	1110	1109	1107	1107	1107	1106	1105
11 q	1105	1105	1105	1105	1105	1103	1101	1101	1103	1102	1100	1103	1106	1106	1109	1111	1111	1111	1111	1110	1109	1108	1107	1106	1106
12	1106	1106	1106	1106	1106	1106	1105	1105	1102	1101	1101	1100	1101	1102	1104	1106	1107	1107	1107	1107	1110	1110	1108	1107	1105
13	1107	1106	1105	1105	1105	1104	1102	1102	1100	1101	1101	1099	1099	1099	1101	1102	1105	1117	1142	1168	1181	1162	1178	1168	1119
14 d	1131	1084	1080	1083	1039	988	981	1012	1031	1082	1096	1115	1142	1116	1220	1168	1141	1134	1129	1126	1128	1129	1129	1128	*1103*
15	1125	1125	1125	1123	1120	1117	1118	1115	1116	1120	1123	1122	1122	1123	1125	1125	1126	1126	1128	1130	1129	1129	1135	1126	1124
16	1122	1119	1116	1119	1119	1117	1117	1116	1115	1117	1117	1118	1118	1116	1117	1120	1119	1118	1117	1116	1115	1117	1120	1118	1118
17	1108	1081	1090	1099	1100	1097	1099	1099	1101	1107	1108	1110	1114	1123	1134	1142	1143	1138	1130	1126	1126	1127	1124	1122	1115
18	1117	1117	1116	1115	1114	1113	1113	1113	1112	1113	1111	1113	1115	1118	1121	1123	1123	1123	1123	1123	1123	1120	1119	1119	1117
19	1119	1118	1116	1116	1116	1114	1113	1113	1112	1110	1111	1112	1115	1116	1120	1122	1123	1119	1116	1118	1116	1116	1117	1120	1116
20 d	1135	1135	1125	1125	1123	1122	1117	1113	1110	1107	1108	1112	1113	1114	1118	1119	1124	1132	1145	1163	1168	1166	1160	1148	*1129*
21	1146	1135	1117	1094	1084	1087	1086	1094	1101	1102	1107	1112	1117	1120	1123	1124	1122	1119	1119	1119	1117	1117	1117	1119	1112
22 q	1119	1119	1119	1118	1117	1115	1113	1112	1112	1112	1112	1112	1113	1113	1117	1118	1117	1117	1117	1115	1113	1113	1113	1114	1115
23	1117	1115	1114	1114	1113	1113	1111	1108	1107	1106	1105	1106	1106	1106	1111	1112	1111	1113	1115	1123	1151	1173	1170	1144	1119
24	1130	1125	1120	1119	1118	1117	1116	1116	1114	1108	1109	1111	1116	1127	1130	1128	1123	1123	1121	1119	1118	1116	1113	1112	1119
25 d	1112	1113	1113	1113	1113	1113	1113	1112	1106	1106	1105	1109	1108	1109	1113	1120	1153	1166	1183	1168	1130	1117	1106	1105	1121
26 d	1098	1083	1077	1093	1099	1096	1100	1104	1110	1114	1119	1123	1127	1129	1125	1130	1132	1137	1140	1136	1124	1122	1117	1117	1115
27 d	1112	1112	1105	1096	1103	1106	1110	1112	1114	1114	1111	1114	1124	1129	1135	1125	1130	1129	1139	1140	1126	1125	1119	1107	1118
28	1105	1094	1099	1101	1102	1096	1102	1107	1111	1113	1113	1116	1114	1128	1152	1153	1130	1127	1127	1125	1123	1119	1100	1107	1115
29	1107	1111	1112	1112	1099	1104	1107	1111	1112	1114	1117	1119	1118	1118	1123	1123	1124	1123	1118	1117	1113	1123	1121	1116	1115
30	1107	1106	1111	1112	1112	1111	1110	1108	1111	1111	1111	1113	1112	1114	1117	1117	1117	1117	1116	1117	1118	1117	1116	1115	1113
31	1112	1107	1109	1107	1106	1105	1105	1105	1105	1106	1102	1106	1107	1111	1117	1114	1113	1112	1111	1111	1111	1111	1111	1111	1109
Mean	1113	1108	1107	1107	1105	1102	*1101*	1103	1103	1106	1106	1108	1111	1115	1120	1120	1120	1120	1121	*1122*	1121	1121	1119	1117	1112

1112 at 0-1h. January 1, 1946.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS, MAGNETIC CHARACTER FIGURES AND TEMPERATURE IN MAGNET HOUSE

149 ESKDALEMUIR — DECEMBER 1945

	TERRESTRIAL MAGNETIC ELEMENTS																3-hr. range indices K	Sum of K indices	Magnetic character of day (0-2)	Temperature in magnet house 200 +
	Horizontal force					Declination				Vertical force										
	Maximum 16,000γ +		Minimum 16,000γ +		Range	Maximum 12° +		Minimum 12° +		Range	Maximum 44,000γ +		Minimum 44,000γ +		Range				
	h. m.	γ	γ	h. m.	γ	h. m.	′	′	h. m.	′	h. m.	γ	γ	h. m.	γ					°A.
1 q	16 13	542	525	10 49	17	12 30	14·1	9·7	5 39	4·4	13 40	1110	1102	10 42	*8*	0,1,0,1,0,0,0,1	3	0	84·7
2	13 20	549	513	22 59	36	13 22	14·0	1·0	23 24	13·0	23 18	1118	1096	12 15	22	0,1,1,1,1,1,0,3	8	0	84·7
3 q	12 31	541	525	23 58	*16*	11 18	13·5	8·7	0 10	4·8	0 1	1113	1099	10 10	14	1,0,1,1,1,0,0,1	5	0	84·6
4 q	18 0	544	525	0 1	19	13 10	13·5	9·6	0 30	*3·9*	0 2	1111	1102	8 20	9	1,0,1,0,0,0,0,0	2	0	84·6
5	19 3	559	507	23 20	52	13 59	14·0	2·9	21 10	11·1	20 42	1119	1098	11 0	21	0,0,1,1,0,1,3,3	9	1	84·6
6	4 20	546	487	14 59	59	13 20	18·3	−1·2	21 4	19·5	17 10	1131	1095	1 15	36	2,1,1,1,3,2,3,3	16	1	84·4
7	0 49	548	503	23 7	45	11 48	14·2	0·0	24 0	14·2	23 2	1117	1095	1 0	22	2,2,1,1,0,0,1,3	10	0	84·4
8	6 46	562	484	13 52	78	5 32	17·3	0·0	0 1	17·3	14 28	1129	1081	6 0	48	3,3,2,2,3,2,2,2	19	1	84·4
9	23 36	561	491	15 33	70	1 52	16·5	2·5	0 55	14·0	15 55	1130	1093	2 30	37	4,1,2,2,1,3,2,3	18	1	84·4
10	7 45	544	526	15 5	18	3 55	15·9	7·8	0 5	8·1	17 8	1112	1099	4 20	13	1,2,1,1,1,1,1,0	8	0	84·4
11 q	7 10	544	521	12 0	23	14 38	13·6	8·7	21 7	4·9	16 0	1112	1099	10 41	13	1,0,0,1,0,0,0,0	2	0	84·3
12	6 5	544	513	12 43	31	13 50	14·3	7·1	20 15	7·2	20 30	1112	1099	11 30	13	0,0,0,0,2,0,2,1	5	0	84·3
13	12 45	569	431	21 32	138	18 12	24·1	−10·3	23 5	34·4	22 30	1191	1097	12 43	94	1,0,1,0,3,3,5,5	18	1	84·2
14 d	4 45	583	*312*	1 41	*271*	13 58	*37·1*	*−26·4*	4 44	*63·5*	14 9	*1287*	*962*	5 42	*325*	5,6,6,4,6,4,1,1	33	2	84·1
15	15 18	520	481	22 20	39	13 26	13·3	−3·2	22 24	16·5	22 40	1137	1114	7 30	23	1,2,2,2,2,2,2,4	17	1	84·1
16	19 51	544	502	1 39	42	13 30	12·4	7·0	23 0	5·4	0 25	1124	1114	19 51	10	1,1,1,1,1,0,2,2	9	0	84·1
17	5 15	548	482	15 10	66	0 35	18·2	3·7	2 44	14·5	15 34	1144	1077	1 45	67	4,3,1,2,2,2,1,2	17	1	84·0
18	12 13	532	511	18 59	21	17 15	13·0	6·1	0 6	6·9	20 20	1125	1111	10 24	14	2,0,1,1,2,1,2,2	11	0	84·0
19	23 12	*644*	442	23 36	202	18 9	16·2	−12·8	23 4	29·0	23 1	1137	1095	23 21	42	1,0,1,2,1,2,3,6	16	1	84·0
20 d	18 19	544	446	21 3	98	18 40	23·2	−1·8	0 1	25·0	20 19	1203	1106	9 45	97	4,3,4,2,2,3,4,4	26	1	84·0
21	4 16	553	458	3 6	95	6 0	17·0	−3·8	2 20	20·8	0 30	1149	1082	4 8	67	3,4,2,2,1,1,1,2	16	1	83·8
22 q	20 17	538	510	0 28	28	12 7	12·9	8·4	0 33	4·5	0 3	1122	1111	8 15	11	1,0,1,1,0,0,0,1	4	0	83·8
23	20 33	586	470	20 48	116	21 33	26·3	5·3	20 49	21·0	21 42	1189	1104	10 20	85	1,0,1,1,1,3,5,4	16	1	83·8
24	15 20	552	488	13 33	64	12 21	15·5	7·7	6 25	7·8	0 1	1135	1106	8 37	29	3,2,2,3,3,3,1,1	18	1	83·8
25 d	22 21	575	434	16 29	141	11 55	18·0	−10·0	16 50	28·0	18 32	1190	1100	22 40	90	0,0,3,3,4,5,4,4	23	1	83·8
26 d	7 30	543	473	12 11	70	1 32	18·7	−1·1	1 10	19·8	18 20	1144	1065	2 0	79	4,3,3,3,3,3,3,3	25	1	83·8
27 d	23 19	562	457	14 1	105	13 51	17·9	−19·2	19 3	37·1	18 56	1148	1093	3 10	55	3,3,2,2,4,4,5,3	26	1	83·8
28	22 0	603	460	15 8	143	1 5	19·4	−4·8	21 48	24·2	15 26	1159	1090	1 27	69	3,2,2,3,4,4,2,4	24	1	83·8
29	18 42	547	497	16 23	50	4 26	16·5	0·8	21 32	15·7	16 22	1125	1095	4 55	30	1,3,1,2,2,3,2,3	17	1	83·8
30	6 3	543	512	10 0	31	0 35	14·4	7·8	20 35	6·6	20 45	1119	1102	0 55	17	2,2,1,2,2,1,1,0	11	0	83·7
31	21 45	547	516	14 18	31	12 59	15·0	8·0	1 41	7·0	14 21	1117	1101	10 40	16	2,1,2,2,2,0,1,2	12	0	83·6
Mean	− −	555	484	− −	71	− −	17·0	0·6	− −	16·5	− −	1141	1093	− −	48	−	14·3	0·61	84·1

q denotes an international quiet day and d an international disturbed day.

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

ALL DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

150 ESKDALEMUIR 1945

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−0·8	+0·1	−1·5	+1·7	+4·1	*+6·5*	+6·3	+4·6	+2·0	0·0	−5·7	*−6·0*	−5·7	−0·9	−1·3	−0·8	−0·4	−0·1	−0·9	−1·9	−1·1	+1·5	+1·5	−1·2
Feb.	+5·9	+4·2	+0·9	+1·8	+3·3	+7·2	*+9·4*	+9·1	+4·5	−6·7	−10·9	*−12·1*	−11·7	−8·6	−6·7	−4·5	−4·8	−0·4	+2·3	+1·7	+3·4	+2·2	+3·7	+6·7
Mar.	+10·2	+3·7	−0·5	+2·5	+7·5	+8·1	+10·3	+6·4	−0·3	−11·5	−19·5	*−24·2*	−18·0	−13·2	−7·7	−1·9	−1·7	+2·0	+4·6	+7·5	+7·2	+7·5	*+10·6*	+10·4
Apr.	+8·3	+4·8	+4·4	+3·8	+5·0	+7·8	+6·5	+1·6	−4·1	−15·7	−22·9	*−26·5*	−25·8	−18·3	−8·9	−3·3	+3·1	+10·4	+10·7	+11·9	*+14·1*	+9·4	+11·8	+12·0
May	+7·0	+5·4	+4·4	+3·9	+4·3	+3·6	−1·3	−5·1	−11·8	−19·8	−24·3	*−25·6*	−21·6	−16·7	−6·7	−0·5	+9·1	+17·4	*+18·1*	+17·1	+14·2	+12·7	+9·3	+7·0
June	+5·8	+2·2	+1·8	+2·9	+6·7	+4·9	+1·5	−2·2	−6·9	−15·6	−23·7	*−25·7*	−22·9	−16·3	−9·4	−0·1	+4·0	+11·0	+18·5	*+19·3*	+16·5	+11·4	+8·9	+7·1
July	+7·3	+6·4	+5·7	+6·4	+7·2	+8·0	+4·0	−5·0	−13·2	−24·6	−29·1	*−31·3*	−29·1	−19·2	−8·0	+2·5	+9·1	+13·4	+17·4	*+18·9*	+17·6	+14·5	+12·1	+8·8
Aug.	+10·7	+7·5	+8·1	+3·8	+4·9	+5·2	+1·2	−5·4	−14·3	−25·5	*−29·0*	−28·0	−21·6	−14·1	−7·9	+0·6	+6·9	+10·4	+15·1	+14·7	+14·7	+13·5	*+15·4*	+13·0
Sept.	+8·6	+8·9	+6·5	+7·5	+8·1	+7·4	+7·0	0·0	−8·9	−18·5	−25·6	*−28·0*	−20·9	−13·8	−6·9	−2·3	+4·5	+6·2	+6·9	+8·5	+11·4	*+12·1*	+10·7	+10·9
Oct.	+4·7	+5·4	+5·0	+7·6	+10·4	*+11·7*	+10·3	+6·9	−1·5	−13·5	−22·3	*−26·4*	−22·9	−13·6	−7·3	−3·6	−0·9	+3·7	+5·3	+6·0	*+11·7*	+11·1	+6·4	+5·9
Nov.	+3·5	+0·9	+1·1	+4·3	+6·1	+6·0	+5·6	+5·6	+2·6	−6·8	−12·8	*−14·1*	−10·6	−6·3	−4·2	−2·5	−0·7	−0·3	+0·4	+2·1	+4·7	+4·4	*+6·3*	+4·6
Dec.	−3·3	−5·3	−1·8	+1·1	+6·7	*+7·3*	*+7·3*	+4·7	+2·9	−0·2	−4·2	−6·9	*−7·8*	−6·4	−3·4	−2·4	−1·1	+0·9	+2·7	+3·7	+1·8	+1·8	+1·8	+0·5
Year	+5·7	+3·7	+2·8	+3·9	+6·2	+7·0	+5·7	+1·8	−4·1	−13·2	−19·1	*−21·2*	−18·2	−12·3	−6·6	−1·6	+2·3	+6·2	+8·5	+9·2	*+9·6*	+8·5	+8·2	+7·2
Winter	+1·3	−0·1	−0·4	+2·3	+5·1	+6·7	+7·2	+5·9	+3·0	−3·4	−8·4	*−9·7*	−9·0	−5·5	−3·9	−2·6	−1·7	0·0	+1·2	+1·5	+2·2	+2·5	+3·3	+2·7
Equinox	+8·0	+5·7	+3·8	+5·3	+7·8	+8·8	+8·5	+3·7	−3·7	−14·8	−22·6	*−26·3*	−21·9	−14·7	−7·7	−2·8	+1·3	+5·6	+6·9	+8·5	*+11·1*	+10·0	+9·9	+9·9
Summer	+7·7	+5·4	+5·0	+4·3	+5·7	+5·4	+1·4	−4·4	−11·6	−21·3	−26·5	*−27·7*	−23·8	−16·5	−8·0	+0·6	+7·3	+13·0	+17·3	*+17·5*	+15·7	+13·1	+11·4	+9·0

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−9·0	−7·5	−7·1	−5·2	−3·3	−0·7	+1·6	+3·0	+0·5	+2·7	+4·0	+8·7	+13·8	*+13·9*	+10·4	+7·1	+5·2	+1·5	+2·7	−4·6	−6·9	−9·8	*−10·4*	*−10·4*
Feb.	−8·4	−8·2	−5·0	−3·5	−1·7	+0·5	+0·5	−0·9	−3·2	−6·4	−1·5	+7·5	+13·4	+19·2	*+20·3*	+12·5	+7·3	+3·9	−2·6	−3·8	−10·7	−10·0	*−10·9*	−8·5
Mar.	−4·4	−9·7	−9·0	−4·9	−5·1	−3·9	−3·9	−6·3	−11·1	−10·7	−1·5	+12·0	+22·9	*+27·8*	+25·5	+20·2	+13·1	+3·2	−6·6	−7·4	−9·9	*−12·4*	−9·8	−8·0
Apr.	−4·7	−0·2	−1·6	−6·0	−10·4	−10·5	−12·2	−17·3	*−19·5*	−14·9	−4·6	+8·3	+23·3	*+27·2*	+25·6	+19·7	+11·8	+5·0	+1·5	+1·5	−3·1	−4·1	−7·6	−7·1
May	−3·4	−6·9	−9·8	−9·6	−11·7	−16·6	−20·1	*−22·4*	−21·7	−14·9	−3·9	+10·2	+21·7	+27·7	*+28·5*	+24·4	+18·9	+13·5	+8·1	+3·9	−0·7	−5·4	−5·9	−3·9
June	−3·0	−4·6	−4·5	−5·9	−12·5	−18·5	−23·1	*−25·8*	−25·4	−18·7	−10·1	+3·8	+15·3	+22·4	*+23·9*	+23·2	+18·5	+15·3	+12·4	+8·6	+4·4	+2·0	+1·2	+1·3
July	−3·6	−7·9	−8·7	−12·2	−14·1	−20·0	−23·2	*−25·1*	−24·2	−17·2	−7·1	+6·4	+18·5	+26·2	*+27·5*	+23·6	+20·1	+15·2	+11·6	+10·7	+6·9	+3·2	−3·7	−2·8
Aug.	−5·3	−7·4	−9·1	−11·6	−12·3	−18·7	−21·8	*−22·6*	−22·5	−14·5	−2·8	+12·0	+24·8	*+30·3*	+26·6	+21·4	+14·3	+8·7	+5·3	+4·1	+2·7	+2·7	+0·1	−4·3
Sept.	−7·0	−5·3	−6·1	−5·9	−6·0	−8·7	−12·9	−16·9	*−18·2*	−14·5	−4·2	+10·6	+23·9	*+27·4*	+26·7	+20·6	+12·5	+7·3	+2·6	+1·1	−2·9	−4·6	−8·1	−11·1
Oct.	−11·6	*−14·5*	−8·8	−7·2	−3·4	−4·4	−4·9	−8·7	−14·4	−11·6	+1·8	+15·9	+25·1	*+27·8*	+26·3	+19·8	+11·0	+6·4	+2·6	−0·2	−7·3	−12·5	−13·0	−14·1
Nov.	*−9·2*	−7·1	−4·3	−3·4	−4·2	−2·3	+0·6	+1·2	−3·8	−6·0	+0·6	+8·6	+13·5	*+14·9*	+11·5	+9·0	+6·0	+4·4	+1·7	−2·5	−7·1	−7·5	−7·0	−7·7
Dec.	−10·6	−8·0	−8·3	−7·2	−4·8	+1·0	+3·0	+2·7	+1·4	+2·4	+6·8	+9·2	+11·6	*+13·8*	+9·8	+9·9	+7·1	+5·0	+1·2	−2·7	−6·3	−9·6	−12·3	*−15·1*
Year	−6·7	−7·3	−6·9	−6·9	−7·5	−8·6	−9·7	−11·6	*−13·5*	−10·4	−1·8	+9·4	+19·0	*+23·2*	+21·9	+17·6	+12·2	+7·4	+3·4	+0·7	−3·4	−5·7	−7·3	−7·6
Winter	−9·3	−7·7	−6·2	−4·8	−3·5	−0·4	+1·4	+1·5	−1·3	−1·9	+2·5	+8·5	+13·1	*+15·5*	+13·0	+9·6	+6·4	+3·7	+0·7	−3·4	−7·7	−9·2	−10·2	*−10·4*
Equinox	−6·9	−7·4	−6·4	−6·0	−6·2	−6·9	−8·4	−12·3	*−15·8*	−12·9	−2·1	+11·7	+23·8	*+27·5*	+26·0	+20·1	+12·1	+5·4	0·0	−1·3	−5·8	−8·4	−9·6	−10·0
Summer	−3·8	−6·7	−8·0	−9·8	−12·7	−18·5	−22·1	*−24·0*	−23·4	−16·3	−6·0	+8·1	+20·1	*+26·7*	+26·6	+23·1	+18·0	+13·1	+9·3	+6·8	+3·3	+0·6	−2·1	−2·4

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−4·2	−5·8	−5·4	−6·7	*−8·8*	−6·9	−5·2	−5·4	−4·7	−2·6	−2·6	−2·5	−1·3	+1·1	+4·3	+5·5	+8·3	+7·7	+9·3	*+9·4*	+6·6	+5·9	+3·2	+0·8
Feb.	−6·1	*−8·1*	−6·2	−4·5	−4·2	−5·0	−5·6	−5·3	−3·5	−0·1	−2·4	−4·0	−4·3	−3·1	+1·3	+7·6	*+10·0*	+9·0	+9·2	+7·9	+7·6	+6·1	+4·3	−0·6
Mar.	−12·9	*−13·8*	−12·1	−8·1	−6·9	−5·3	−5·0	−4·1	−3·7	−2·8	−5·8	−7·7	−7·3	−2·9	+5·8	+14·5	+19·2	*+21·7*	+21·5	+15·4	+7·7	+3·7	−2·7	−8·4
Apr.	−6·2	−8·7	−9·9	−7·8	−3·6	−2·7	−2·1	−2·4	−3·6	−5·0	−8·1	*−10·9*	−9·6	−1·2	+5·2	+10·1	+12·8	*+15·1*	+14·9	+12·1	+8·1	+4·8	+0·5	−1·8
May	−2·4	−4·1	−3·5	−3·1	−2·0	−1·6	−1·5	−2·2	−3·9	−7·3	−11·6	*−14·8*	−14·3	−8·4	−2·4	+4·3	+10·8	+14·7	*+15·7*	+14·3	+11·5	+7·7	+3·6	+0·5
June	−0·2	−1·6	−1·8	−2·2	−3·0	−1·3	−1·8	−2·5	−3·8	−6·8	−9·7	*−12·0*	−10·7	−6·6	−2·4	+2·5	+8·0	+10·3	+10·8	*+11·1*	+9·6	+7·6	+4·5	+2·0
July	−3·7	−4·4	−4·9	−3·7	−3·4	−3·2	−4·3	−4·6	−4·1	−4·8	−7·5	*−10·1*	−9·1	−5·7	−1·0	+4·4	+9·2	*+12·8*	+12·7	+11·3	+9·9	+7·9	+4·7	+1·6
Aug.	−1·6	−3·5	−5·9	−9·1	−4·6	−0·1	+1·2	+0·9	−1·1	−4·6	−9·1	*−13·0*	−12·5	−7·0	+0·2	+6·2	+11·2	*+13·2*	+12·2	+9·9	+7·3	+5·7	+3·2	+0·9
Sept.	−4·3	−7·8	−6·3	−5·6	−4·5	−2·2	−0·1	+0·7	−0·9	−3·2	−6·6	*−9·0*	−8·7	−4·6	+1·1	+6·5	+11·4	*+13·1*	+11·4	+10·2	+7·9	+3·0	+0·2	−1·7
Oct.	−11·1	*−11·3*	−7·6	−6·6	−5·3	−3·8	−2·3	−1·3	−0·1	−2·9	−7·4	−6·8	−4·8	+0·8	+7·7	+11·0	*+12·3*	+12·2	+11·5	+12·0	+8·0	+3·9	−1·3	−6·8
Nov.	−2·2	−2·8	−4·4	−5·3	−4·1	−4·3	−5·3	*−6·2*	−4·2	−2·7	−3·8	−3·3	−0·7	+1·9	+4·4	+5·6	+6·2	+6·9	+7·7	+7·2	+4·3	+3·8	+2·0	−0·7
Dec.	+0·5	−3·9	−5·6	−5·5	−7·7	−10·3	*−10·8*	−9·7	−8·9	−6·6	−5·9	−3·9	−1·4	+2·4	+7·9	+7·6	+7·4	+7·7	+8·9	*+9·6*	+8·7	+8·2	+6·9	+4·4
Year	−4·5	−6·3	−6·1	−5·7	−4·8	−3·9	−3·6	−3·5	−3·5	−4·1	−6·7	*−8·2*	−7·1	−2·8	+2·7	+7·1	+10·6	+12·0	*+12·1*	+10·9	+8·1	+5·7	+2·4	−0·8
Winter	−3·0	−5·1	−5·4	−5·5	−6·2	−6·6	*−6·7*	*−6·7*	−5·3	−3·0	−3·7	−3·4	−1·9	+0·6	+4·5	+6·6	+8·0	+7·8	*+8·8*	+8·5	+6·8	+6·0	+4·1	+1·0
Equinox	−8·6	*−10·4*	−9·0	−7·0	−5·1	−3·5	−2·4	−1·8	−2·1	−3·5	−7·0	−8·6	−7·6	−2·0	+4·9	+10·5	+13·9	*+15·5*	+14·8	+12·4	+7·9	+3·9	−0·8	−4·7
Summer	−2·0	−3·4	−4·0	−4·5	−3·3	−1·5	−1·6	−2·1	−3·2	−5·9	−9·5	*−12·5*	−11·7	−6·9	−1·4	+4·3	+9·8	+12·7	*+12·9*	+11·7	+9·6	+7·2	+4·0	+1·3

DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS, DECLINATION, INCLINATION, AND HORIZONTAL FORCE

ALL DAYS

Departures from the mean of the 24 hourly values (incorrected for non-cyclic change)

151 ESKDALEMUIR 1945

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-1·80	-1·52	-1·38	-1·14	-0·85	-0·42	+0·04	+0·40	+0·01	+0·54	+1·07	+2·04	*+3·06*	+2·86	+2·17	+1·49	+1·07	+0·31	+0·58	-0·86	-1·36	-2·06	*-2·19*	-2·06
Feb.	-1·97	-1·86	-1·06	-0·78	-0·50	-0·21	-0·31	-0·58	-0·84	-1·01	+0·18	+2·05	+3·25	+4·29	*+4·42*	+2·74	+1·70	+0·81	-0·63	-0·85	-2·32	-2·12	*-2·37*	-2·03
Mar.	-1·34	-2·14	-1·81	-1·10	-1·37	-1·14	-1·25	-1·55	-2·24	-1·66	+0·55	+3·50	+5·44	*+6·23*	+5·51	+4·19	+2·73	+0·56	-1·54	-1·84	-2·33	*-2·85*	-2·47	-2·08
Apr.	-1·33	-0·25	-0·52	-1·39	-2·33	-2·48	-2·76	-3·59	*-3·78*	-2·34	+0·08	+2·85	+5·88	*+6·33*	+5·60	+4·15	+2·27	+0·55	-0·16	-0·23	-1·26	-1·26	-2·06	-1·97
May	-0·99	1·65	-2·19	-2·13	-2·57	-3·53	-4·03	*-4·33*	-3·89	-2·16	+0·29	+3·21	+5·37	*+6·37*	+6·08	+4·97	+3·45	+1·97	+0·84	+0·03	-0·76	-1·66	-1·60	-1·09
June	-0·87	-1·03	-0·99	-1·33	-2·84	-3·98	-4·77	*-5·14*	-4·86	-3·12	-1·00	+1·90	+4·11	*+5·27*	+5·26	+4·72	+3·58	+2·62	+1·71	+0·89	+0·17	-0·10	-0·16	-0·04
July	-1·05	-1·88	-2·01	-2·76	-3·19	-4·42	*-4·89*	*-4·89*	-4·33	-2·42	-0·16	+2·67	+5·05	*+6·17*	+5·94	+4·68	+3·69	+2·49	+1·58	+1·34	+0·62	+0·01	-1·28	-0·96
Aug.	-1·54	-1·84	-2·20	-2·52	-2·71	-4·03	*-4·49*	-4·35	-3·94	-1·83	+0·71	+3·68	+5·99	*+6·78*	+5·76	+4·32	+2·59	+1·30	+0·41	+0·18	-0·10	-0·05	-0·67	-1·45
Sept.	-1·80	-1·47	-1·53	-1·54	-1·58	-2·10	-2·92	*-3·44*	-3·31	-2·13	+0·28	+3·38	+5·77	*+6·17*	+5·73	+4·29	+2·34	+1·20	+0·22	-0·16	-1·08	-1·47	-2·12	-2·73
Oct.	-2·56	*-3·18*	-2·00	-1·80	-1·14	-1·39	-1·45	-2·08	-2·87	-1·77	+1·35	+4·37	+6·11	*+6·24*	+5·66	+4·19	+2·28	+1·14	+0·29	-0·31	-2·00	-3·03	-2·93	-3·12
Nov.	-2·02	-1·49	-0·93	-0·89	-1·12	-0·74	-0·12	0·00	-0·88	-0·92	+0·69	+2·37	+3·22	*+3·31*	+2·52	+1·93	+1·25	+0·91	+0·33	-0·61	-1·64	-1·71	-1·70	-1·76
Dec.	-2·01	-1·40	-1·61	-1·52	-1·27	-0·12	+0·28	+0·34	+0·16	+0·49	+1·56	+2·18	+2·71	*+3·08*	+2·15	+2·13	+1·50	+0·98	+0·13	-0·71	-1·36	-2·03	-2·58	*-3·08*
Year	-1·61	-1·64	-1·52	-1·57	-1·79	-2·05	-2·22	-2·43	*-2·56*	-1·53	+0·47	+2·85	+4·66	*+5·26*	+4·73	+3·65	+2·37	+1·24	+0·31	-0·26	-1·12	-1·53	-1·84	-1·86
Winter	-1·95	-1·57	-1·25	-1·08	-0·93	-0·37	-0·03	+0·04	-0·39	-0·23	+0·87	+2·16	+3·06	*+3·39*	+2·81	+2·07	+1·38	+0·75	+0·10	-0·76	-1·67	-1·98	-2·21	*-2·23*
Equinox	-1·76	-1·76	-1·47	-1·46	-1·61	-1·78	-2·09	-2·67	*-3·05*	-1·97	+0·57	+3·53	+5·80	*+6·24*	+5·63	+4·21	+2·41	+0·86	-0·30	-0·63	-1·67	-2·15	-2·39	-2·47
Summer	-1·11	-1·60	-1·85	-2·19	-2·83	-3·99	-4·55	*-4·68*	-4·25	-2·38	-0·04	+2·87	+5·13	*+6·15*	+5·76	+4·67	+3·33	+2·09	+1·13	+0·61	-0·02	-0·45	-0·93	-0·89

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·08	-0·04	+0·07	-0·21	-0·44	*-0·59*	-0·57	-0·48	-0·26	-0·10	+0·25	+0·21	+0·14	-0·11	+0·05	+0·09	+0·16	+0·18	+0·25	*+0·42*	+0·34	+0·19	+0·13	+0·25
Feb.	-0·42	-0·36	-0·14	-0·18	-0·30	-0·61	*-0·77*	-0·72	-0·34	+0·53	*+0·68*	+0·59	+0·47	+0·21	+0·18	+0·31	+0·46	+0·20	+0·11	+0·13	+0·11	+0·15	+0·02	-0·33
Mar.	*-0·93*	-0·44	-0·14	-0·29	-0·59	-0·61	-0·74	-0·43	+0·08	+0·84	+1·16	*+1·23*	+0·67	+0·40	+0·29	+0·20	+0·40	+0·36	+0·32	-0·01	-0·14	-0·23	-0·63	-0·78
Apr.	-0·63	-0·53	-0·52	-0·35	-0·27	-0·43	-0·31	+0·08	+0·46	+1·12	*+1·38*	+1·35	+1·13	+0·79	+0·35	+0·19	-0·05	-0·38	-0·36	-0·51	-0·68	-0·44	-0·66	*-0·73*
May	-0·46	-0·36	-0·23	-0·20	-0·17	-0·04	+0·33	+0·60	+0·99	+1·34	*+1·37*	+1·18	+0·76	+0·49	-0·03	-0·21	-0·60	*-0·98*	-0·92	-0·82	-0·64	-0·57	-0·44	-0·39
June	-0·34	-0·12	-0·10	-0·16	-0·34	-0·09	+0·18	+0·45	+0·72	+1·13	*+1·46*	+1·34	+1·02	+0·59	+0·22	-0·26	-0·33	-0·69	*-1·13*	-1·12	-0·91	-0·59	-0·49	-0·43
July	-0·52	-0·42	-0·37	-0·34	-0·35	-0·32	-0·04	+0·57	+1·11	+1·75	*+1·83*	+1·72	+1·43	+0·75	+0·11	-0·39	-0·66	-0·78	-1·00	*-1·12*	-1·01	-0·80	-0·62	-0·50
Aug.	-0·67	-0·48	-0·55	-0·31	-0·26	-0·08	+0 27	+0·70	+1·24	*+1·77*	+1·72	+1·35	+0·76	+0·33	+0·15	-0·19	-0·38	-0·48	-0·77	-0·78	-0·83	-0·79	*-0·94*	-0·77
Sept.	-0·57	*-0·71*	-0·50	-0·55	-0·56	-0·42	-0·28	+0·26	+0·83	+1·35	*+1·58*	+1·47	+0·82	+0·41	+0·10	+0·02	-0·19	-0·19	-0·21	-0·32	-0·51	-0·65	-0·58	-0·60
Oct.	-0·42	-0·43	-0·39	-0·56	-0·77	*-0·80*	-0·66	-0·36	+0·30	+0·99	+1·26	*+1·35*	+1·03	+0·52	+0·30	+0·23	+0·20	-0·03	-0·10	-0·09	-0·47	-0·46	-0·27	-0·36
Nov.	-0·16	-0·03	-0·12	-0·37	-0·45	-0·47	-0·51	*-0·54*	-0·22	+0·47	*+0·74*	+0·72	+0·49	+0·25	+0·22	+0·17	+0·11	+0·13	+0·14	+0·08	-0·10	-0·09	-0·27	-0·21
Dec.	*+0·38*	+0·37	+0·10	-0·11	-0·56	-0·75	*-0·79*	-0·59	-0·43	-0·18	+0·04	+0·23	+0·31	+0·29	+0·28	+0·21	+0·16	+0·06	+0·03	+0·04	+0·19	+0·22	+0·23	+0·29
Year	-0·39	-0·30	-0·24	-0·30	-0·42	*-0·43*	-0·33	-0·04	+0·38	+0·92	*+1·12*	+1·06	+0·75	+0·41	+0·19	+0·03	-0·06	-0·21	-0·31	-0·34	-0·39	-0·34	-0·38	-0·38
Winter	-0·03	-0·01	-0·02	-0·22	-0·44	-0·60	*-0·66*	-0·58	-0·31	+0·17	*+0·43*	*+0·43*	+0·36	+0·16	+0·19	+0·20	+0·22	+0·14	+0·13	+0·16	+0·13	+0·11	+0·03	0·00
Equinox	*-0·64*	-0·53	-0·39	-0·44	-0·55	-0·57	-0·50	-0·11	+0·42	+1·07	+1·34	*+1·35*	+0·92	+0·52	+0·26	+0·16	+0·09	-0·06	-0·09	-0·23	-0·45	-0·44	-0·53	-0·62
Summer	-0·50	-0·35	-0·31	-0·25	-0·28	-0·13	+0·18	+0·58	+1·02	+1·49	*+1·60*	+1·39	+0·99	+0·54	+0·11	-0·26	-0·49	-0·73	-0·95	*-0·96*	-0·85	-0·69	-0·62	-0·53

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-2·7	-1·5	-3·0	+0·6	+3·3	+6·2	*+6·5*	+5·1	+2·1	+0·6	*-4·7*	-4·0	-2·6	+2·1	+0·9	+0·7	+0·7	+0·2	-0·3	-2·8	-2·6	-0·6	-0·8	-3·4
Feb.	+4·0	+2·4	-0·2	+1·0	+2·9	+7·2	*+9·3*	+8·7	+3·7	-7·9	*-11·0*	-10·2	-8·6	-4·3	-2·2	-1·8	-3·1	+0·4	+1·7	+0·9	+1·1	0·0	+1·3	+4·7
Mar.	+9·1	+1·5	-2·4	+1·4	+6·2	+7·1	+9·2	+4·9	-2·6	-13·5	-19·4	*-21·1*	-12·7	-7·0	-2·1	+2·4	+1·1	+2·6	+3·1	+5·8	+4·9	+4·7	+8·3	+8·5
Apr.	+7·1	+4·7	+4·0	+2·4	+2·7	+5·4	+3·8	-2·1	-8·2	-18·5	-23·4	*-24·1*	-20·3	-12·1	-3·3	+0·9	+5·5	+11·2	+10·8	+12·0	*+13·1*	+8·3	+9·9	+10·2
May	+6·0	+3·8	+2·2	+1·8	+1·7	0·0	-5·5	-9·7	-16·1	-22·5	*-24·6*	-22·9	-16·5	-10·4	-0·5	+4·7	+12·9	*+19·9*	+19·4	+17·5	+13·7	+11·3	+7·8	+6·0
June	+5·0	+1·2	+0·8	+1·6	+3·9	+0·9	-3·4	-7·6	-12·1	-19·2	*-25·3*	-24·3	-19·1	-11·2	-4·1	+4·8	+7·8	+14·0	*+20·7*	*+20·7*	+17·1	+11·6	+9·0	+7·2
July	+6·4	+4·6	+3·7	+3·7	+4·0	+3·6	-1·0	-10·2	-18·0	-27·7	*-29·9*	-29·2	-24·5	-13·2	-2·0	+7·4	+13·2	+16·3	+19·5	*+20·8*	+18·7	+14·8	+11·0	+8·0
Aug.	+9·4	+5·8	+6·0	+1·3	+2·2	+1·1	-3·5	-10·1	-18·8	-28·0	*-28·9*	-24·8	-15·9	-7·4	-2·1	+5·1	+9·8	+12·0	*+15·9*	+15·2	+15·0	+13·8	+15·1	+11·8
Sept.	+6·9	+7·6	+5·1	+6·1	+6·6	+5·4	+4·1	-3·6	-12·6	-21·2	*-25·9*	-25·1	-15·4	-7·7	-1·1	+2·1	+7·0	+7·6	+7·3	+8·5	+10·5	*+10·8*	+8·7	+8·3
Oct.	+2·1	+2·2	+3·0	+5·9	+9·5	*+10·5*	+9·0	+4·9	-4·5	-15·7	-21·4	*-22·5*	-17·1	-7·4	-1·6	+0·7	+1·5	+5·0	+5·7	+5·8	+9·9	+8·2	+3·5	+2·8
Nov.	+1·5	+0·6	+0·1	+3·5	+5·1	+5·4	+5·6	*+5·7*	+1·7	-7·9	*-12·4*	-11·9	-7·5	-3·0	-1·7	-0·5	+0·6	+0·6	+0·8	+1·5	+3·1	+2·7	+4·7	+2·9
Dec.	-5·4	*-6·9*	-3·5	-0·4	+5·5	+7·3	*+7·8*	+5·1	+3·1	+0·3	-2·7	-4·8	-5·2	-3·4	-1·3	-0·3	+0·4	+1·9	+2·9	+3·0	+0·4	-0·3	-0·8	-2·7
Year	+4·1	+2·1	+1·3	+2·4	+4·5	+5·0	+3·5	-0·7	-6·9	-15·1	*-19·1*	-18·7	-13·8	-7·1	-1·8	+2·2	+4·8	+7·6	+9·0	*+9·1*	+8·7	+7·1	+6·5	+5·4
Winter	-0·7	-1·7	-1·7	+1·2	+4·2	+6·5	*+7·3*	+6·1	+2·7	-3·7	*-7·7*	*-7·7*	-6·0	-2·1	-1·1	-0·5	-0·3	+0·8	+1·3	+0·7	+0·5	+0·5	+1·1	+0·4
Equinox	+6·3	+4·0	+2·4	+3·9	+6·3	+7·1	+6·5	+1·0	-7·0	-17·2	-22·5	*-23·2*	-16·4	-8·5	-2·0	+1·5	+3·8	+6·6	+6·7	+8·0	*+9·6*	+8·0	+7·6	+7·5
Summer	+6·7	+3·9	+3·2	+2·1	+2·9	+1·4	-3·3	-9·4	-16·3	-24·3	*-27·2*	-25·3	-19·0	-10·5	-2·2	+5·5	+10·9	+15·5	*+18·9*	+18·5	+16·1	+12·9	+10·7	+8·3

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

152 ESKDALEMUIR 1945

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−1·1	−1·5	−1·7	+0·1	+1·0	+2·9	+2·5	+2·3	−1·1	−4·5	−5·7	*−8·0*	−6·9	−2·7	+0·5	+1·8	+2·7	+3·7	+3·9	*+4·2*	+3·3	+1·1	+0·8	+2·5
Feb.	+0·7	−0·6	−1·2	−0·2	+0·9	+3·9	+7·1	*+8·8*	+6·6	−0·2	−6·5	−10·1	*−10·3*	−7·1	−5·0	−0·7	−2·8	+0·1	+2·3	+3·6	+2·3	+1·9	+3·4	+3·0
Mar.	+4·9	+2·5	+2·2	+3·9	+6·5	+6·3	+7·9	+6·0	−2·5	−15·2	−23·6	*−24·3*	−21·5	−17·8	−9·2	−2·1	+3·0	+5·4	+8·9	+10·0	+9·9	+12·8	+12·3	*+13·8*
Apr.	+6·6	+5·0	+2·8	+2·8	+1·9	+3·3	+4·4	+1·2	−5·1	−14·4	−21·0	*−21·9*	−20·3	−14·6	−5·1	−1·8	+5·0	+8·8	+8·2	+9·3	+9·6	*+12·1*	+12·0	+11·3
May	+4·7	+3·3	+1·7	+2·2	+5·3	+4·6	+0·2	−3·1	−9·3	−14·4	*−20·2*	−19·3	−17·9	−12·7	−2·4	−2·7	+5·9	+12·2	*+13·1*	+12·5	+10·3	+10·5	+8·5	+6·7
June	+5·4	+3·0	+2·7	+2·1	+6·8	+6·3	+0·3	−2·5	−9·0	−15·9	−23·3	*−26·5*	−21·5	−11·8	−6·5	−4·3	+3·8	+10·7	+17·1	*+17·2*	+15·8	+11·5	+10·3	+8·2
July	+7·0	+5·4	+6·1	+6·8	+7·6	+6·9	+3·3	−1·7	−9·4	−18·7	−29·3	*−31·8*	−28·9	−19·7	−8·9	+2·1	+7·2	+11·1	+15·3	*+18·6*	+17·6	+12·2	+11·0	+10·1
Aug.	+6·7	+5·4	+6·3	+4·7	+6·1	+5·7	+0·2	−6·8	−14·0	−24·4	*−29·9*	−29·8	−23·3	−13·9	−4·8	+4·1	+9·6	+14·7	*+15·5*	+14·3	+14·1	+14·0	+13·1	+12·4
Sept.	+6·9	+6·2	+6·4	+6·8	+7·5	+8·2	+7·0	+0·8	−9·4	−21·0	−26·1	*−27·2*	−19·9	−12·5	−8·2	−2·5	+0·3	+5·0	+9·8	+11·3	+11·4	+11·7	*+13·8*	+13·6
Oct.	+5·7	+6·1	+4·3	+6·8	+6·9	+8·2	+7·9	+4·0	−4·2	−17·4	−27·3	*−29·6*	−25·1	−16·2	−6·2	+0·1	+3·9	+8·3	+9·6	+10·7	+11·0	*+11·2*	+11·2	+10·2
Nov.	+1·7	+0·5	+0·2	+2·4	+4·3	+5·0	*+6·9*	+6·4	+1·8	−5·8	−11·7	*−14·2*	−11·3	−7·5	−4·5	−3·3	−0·5	+3·3	+4·3	+5·0	+4·5	+4·2	+4·7	+3·3
Dec.	−3·5	−1·6	−0·1	−1·5	+1·3	+2·6	+2·9	+2·1	0·0	−1·6	−4·7	*−5·5*	−4·1	−2·7	−2·1	−0·7	+1·0	+0·5	+3·3	*+4·5*	+3·2	+3·6	+2·4	+0·8
Year	+3·8	+2·9	+2·5	+3·0	+4·7	+5·3	+4·2	+1·5	−4·7	−12·8	−19·1	*−20·7*	−17·6	−11·6	−5·2	−0·8	+3·3	+7·0	+9·2	*+10·1*	+9·4	+8·9	+8·6	+7·9
Winter	−0·5	−0·8	−0·7	+0·1	+1·9	+3·6	*+4·9*	*+4·9*	+1·9	−3·1	−7·2	*−9·5*	−8·1	−5·0	−2·8	−0·8	+0·1	+1·9	+3·5	+4·3	+3·3	+2·7	+2·8	+2·4
Equinox	+6·0	+5·0	+3·9	+5·1	+5·8	+6·6	+6·8	+3·0	−5·3	−17·0	−24·5	*−25·8*	−21·7	−15·3	−7·2	−1·5	+3·1	+6·8	+9·2	+10·4	+10·5	+11·9	*+12·3*	+12·2
Summer	+6·0	+4·3	+4·2	+3·9	+6·5	+5·9	+1·0	−3·5	−10·4	−18·3	−25·7	*−26·8*	−23·0	−14·5	−5·6	−0·2	+6·7	+12·1	+15·3	*+15·6*	+14·5	+12·0	+10·7	+9·3

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−3·3	−3·5	−3·5	−3·1	−2·8	−4·3	−4·2	−4·8	*−6·2*	−4·0	+1·8	+5·8	+12·1	*+12·7*	+7·9	+3·8	+3·6	+4·0	+2·8	−0·3	−1·9	−4·9	−5·6	−2·0
Feb.	*−10·0*	−7·2	−3·6	−2·9	−1·9	−1·2	−1·5	−3·1	−6·2	−9·6	−6·1	+2·7	+9·6	+16·0	*+16·8*	+11·9	+6·6	+3·9	+2·5	+1·9	+0·1	−5·1	−6·7	−6·8
Mar.	−2·2	−2·9	−1·3	−2·7	−4·1	−4·6	−8·4	−13·9	*−18·0*	−16·8	−6·0	+8·0	+19·4	*+21·8*	+20·4	+12·8	+5·6	+1·5	+2·9	+2·5	+0·2	−0·4	−4·5	−9·5
Apr.	+3·5	−0·3	+2·3	+0·2	−8·7	−10·0	−14·7	−20·7	*−24·6*	−19·4	−9·8	+3·8	+17·1	*+22·2*	+20·8	+12·9	+7·9	+3·3	+0·8	+1·5	+2·9	+2·7	+3·1	+2·8
May	−3·1	−5·5	−5·6	−6·7	−10·8	−15·7	−17·5	*−19·3*	−18·0	−12·6	−4·7	+9·2	+18·1	+23·0	*+23·7*	+15·7	+12·6	+8·7	+4·9	+2·5	+3·7	+2·0	−2·9	−1·9
June	−1·5	−4·1	−5·2	−4·7	−10·2	−15·4	−21·2	−22·7	*−23·0*	−17·3	−9·8	+3·7	+13·5	+18·3	*+19·1*	+16·1	+12·9	+11·5	+10·6	+8·7	+7·8	+6·2	+4·6	+2·1
July	−1·3	−4·7	−5·6	−8·2	−13·8	−21·5	−25·0	−24·5	*−25·6*	−19·8	−8·4	+4·8	+18·1	+26·1	*+27·6*	+24·7	+18·1	+12·2	+10·3	+7·9	+2·7	+2·7	+2·1	+1·3
Aug.	−3·9	−4·7	−5·8	−5·9	−7·7	−15·0	−19·2	−23·0	*−24·8*	−20·0	−9·7	+6·6	+21·0	*+27·7*	+25·3	+19·2	+12·0	+7·6	+5·7	+4·5	+5·1	+3·1	+2·3	−0·2
Sept.	−6·4	−2·1	−1·1	−4·2	−4·6	−6·4	−11·3	−16·7	*−19·8*	−16·4	−8·9	+6·7	+20·1	*+24·5*	+20·9	+15·3	+9·7	+7·5	+3·9	+2·5	−2·6	−1·3	−3·3	−6·1
Oct.	−5·9	−7·0	−5·0	−4·5	−4·0	−4·0	−7·5	−14·1	*−20·6*	−20·1	−9·3	+7·5	+16·3	*+20·7*	+19·5	+13·9	+8·1	+7·1	+6·4	+4·0	+2·5	−0·4	−0·4	−3·0
Nov.	−6·5	−4·8	−4·3	−4·0	−4·4	−4·4	−5·1	−5·4	−7·9	*−8·6*	−1·2	+8·5	*+13·7*	+13·1	+9·7	+6·4	+5·5	+5·3	+3·1	−0·1	+0·7	−2·0	−3·2	−4·1
Dec.	*−5·9*	−3·5	−1·9	−2·1	−2·9	−3·0	−2·5	−4·5	−4·1	−2·5	+0·7	+7·1	*+9·9*	+9·4	+7·4	+5·7	+5·2	+2·8	+1·2	−0·4	−2·2	−4·1	−4·9	−5·1
Year	−3·9	−4·2	−3·4	−4·1	−6·3	−8·8	−11·5	−14·4	*−16·6*	−14·0	−6·0	+6·2	+15·8	*+19·6*	+18·3	+13·2	+9·0	+6·3	+4·6	+2·9	+1·6	−0·1	−1·6	−2·7
Winter	*−6·4*	−4·7	−3·3	−3·1	−3·0	−3·2	−3·3	−4·5	−6·1	−6·2	−1·2	+6·0	+11·4	*+12·8*	+10·5	+7·0	+5·2	+4·0	+2·4	+0·3	−0·8	−4·0	−5·1	−4·5
Equinox	−2·8	−3·1	−1·3	−2·8	−5·3	−6·2	−10·5	−16·3	*−20·7*	−18·2	−8·5	+6·5	+18·2	*+22·3*	+20·4	+13·7	+7·8	+4·8	+3·5	+2·7	+0·7	+0·2	−1·3	−3·9
Summer	−2·5	−4·8	−5·6	−6·4	−10·6	−16·9	−20·7	−22·4	*−22·8*	−17·4	−8·1	+6·1	+17·7	+23·8	*+23·9*	+18·9	+13·9	+10·0	+7·9	+5·9	+4·8	+3·5	+1·5	+0·3

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+1·7	+1·5	+1·1	+0·1	−0·7	−1·8	−1·3	*−1·9*	−1·7	−0·1	−1·5	−0·9	−0·7	+0·7	+1·9	+0·1	−0·7	−0·6	−0·3	+0·1	−0·1	*+2·3*	+2·1	+0·7
Feb.	−1·2	−1·1	−1·2	−0·4	−0·8	−1·1	−1·6	−2·6	−1·4	+0·3	−2·6	*−6·0*	*−6·0*	−5·3	−2·2	+2·6	+4·8	*+5·1*	+4·2	+3·4	+3·4	+4·1	+4·0	+1·6
Mar.	+0·4	+1·3	+1·8	+0·5	−0·1	+0·4	+0·7	+1·1	−0·6	−0·5	−5·4	*−8·9*	−8·8	−4·7	+1·0	+4·7	*+5·7*	+5·0	+2·9	+2·7	+2·0	+1·9	0·0	−3·1
Apr.	−0·1	+0·4	+0·9	+0·2	+2·2	+2·9	+3·0	+2·4	−0·1	−3·2	−7·5	−12·6	*−13·3*	−6·6	−0·7	+1·8	+3·6	+4·7	*+6·2*	+4·0	+3·1	+3·2	+3·1	+2·4
May	−1·1	+0·2	+1·4	+1·3	+2·8	+3·0	+2·3	+0·6	−1·8	−6·9	−10·8	−13·4	*−13·7*	−8·4	−3·6	+1·7	+4·8	+7·4	*+7·9*	+7·0	+6·2	+5·9	+4·6	+2·6
June	+2·8	+2·7	+3·6	+3·7	+2·3	+3·2	+1·5	+0·1	−1·4	−7·1	−12·2	*−14·3*	−13·4	−8·3	−4·4	−0·9	+3·1	+6·0	+7·1	*+7·7*	+6·6	+5·5	+3·2	+2·9
July	+2·6	+3·2	+3·8	+5·2	+6·4	*+7·5*	+4·4	+0·4	−1·4	−5·8	−9·6	−14·0	*−14·8*	−11·4	−8·2	−2·8	+2·8	+6·5	+5·6	+4·6	+5·0	+4·2	+3·0	+2·8
Aug.	+1·9	+2·4	+2·5	+2·7	+3·3	+4·6	*+5·1*	+4·7	+2·1	−3·4	−9·1	*−14·7*	−14·5	−10·0	−5·7	+0·7	+4·3	+4·4	+4·3	+3·7	+2·5	+2·8	+2·9	+2·5
Sept.	+3·9	+2·3	+1·4	+1·7	+1·9	+2·7	*+4·3*	+3·9	+1·4	−1·9	−6·3	−11·9	*−13·7*	−10·3	−4·6	−0·3	+1·9	+3·7	*+4·3*	+3·3	+3·4	*+4·3*	+2·9	+1·7
Oct.	+1·3	+0·2	−0·1	−1·0	−1·2	−0·5	+1·4	+2·8	*+5·9*	+1·8	−2·1	*−4·8*	−4·7	−3·2	+0·3	+3·0	+3·0	+0·3	0·0	−1·0	−1·5	+0·2	−0·1	0·0
Nov.	+1·2	+1·3	+1·2	+0·9	+0·2	−1·1	−1·8	−1·9	−2·0	−2·5	−4·2	*−5·5*	−3·2	+0·5	+2·4	+2·9	+2·2	+1·7	+1·0	+0·7	+0·6	+2·1	+1·8	+1·5
Dec.	*+2·6*	+1·3	+1·0	+0·4	+0·4	−0·9	−1·6	−2·6	−2·8	−2·9	*−3·2*	−2·6	−1·4	−0·1	+1·6	+2·4	+2·0	+1·7	+1·6	+0·8	+0·4	+0·3	+0·8	+0·8
Year	+1·3	+1·3	+1·5	+1·3	+1·4	+1·6	+1·4	+0·6	−0·3	−2·7	−6·2	*−9·1*	−9·0	−5·6	−1·9	+1·3	+3·1	*+3·8*	+3·7	+3·1	+2·6	+3·1	+2·4	+1·4
Winter	+1·1	+0·7	+0·5	+0·3	−0·2	−1·2	−1·6	−2·3	−2·0	−1·3	−2·9	*−3·7*	−2·8	−1·1	+0·9	+2·0	+2·1	+2·0	+1·6	+1·3	+1·1	+2·2	+2·2	+1·1
Equinox	+1·4	+1·1	+1·0	+0·3	+0·7	+1·4	+2·3	+2·5	+1·7	−0·9	−5·3	−9·5	*−10·1*	−6·2	−1·0	+2·3	*+3·5*	+3·4	+3·3	+2·3	+1·7	+2·4	+1·5	+0·3
Summer	+1·5	+2·1	+2·8	+3·2	+3·7	+4·6	+3·3	+1·5	−0·6	−5·8	−10·4	*−14·1*	*−14·1*	−9·5	−5·5	−0·3	+3·7	+6·1	*+6·2*	+5·7	+5·1	+4·6	+3·4	+2·7

INTERNATIONAL QUIET DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cyclic change)

153 ESKDALEMUIR 1945

DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·63	-0·64	-0·63	-0·63	-0·61	-1·00	-0·97	-1·07	*-1·21*	-0·62	+0·61	+1·53	+2·77	+2·70	+1·57	+0·69	+0·61	+0·64	+0·39	-0·25	-0·53	-1·04	-1·17	-0·51
Feb.	*-2·07*	-1·44	-0·68	-0·59	-0·42	-0·42	-0·61	-1·02	-1·56	-1·95	-0·96	+1·00	+2·41	+3·56	*+3·64*	+2·45	+1·46	+0·78	+0·41	+0·22	-0·08	-1·11	-1·50	-1·52
Mar.	-0·66	-0·70	-0·36	-0·72	-1·12	-1·21	-2·06	-3·08	*-3·54*	-2·74	-0·18	+2·70	+4·90	+5·22	+4·56	+2·70	+1·00	+0·07	+0·20	+0·06	-0·40	-0·64	-1·46	-2·54
Apr.	+0·43	-0·28	+0·35	-0·08	-1·84	-2·17	-3·18	-4·26	*-4·77*	-3·30	-1·07	+1·74	+4·37	*+5·16*	+4·45	+2·70	+1·38	+0·29	-0·20	-0·10	+0·17	+0·02	+0·11	+0·08
May	-0·84	-1·26	-1·22	-1·46	-2·42	-3·39	-3·56	*-3·78*	-3·24	-1·92	-0·06	+2·72	+4·46	*+5·24*	+4·92	+3·30	+2·30	+1·23	+0·42	-0·04	-0·30	-0·06	-0·96	-0·68
June	-0·54	-0·97	-1·18	-1·05	-2·38	-3·41	-4·32	*-4·49*	-4·28	-2·81	-0·96	+1·91	+3·70	*+4·23*	+4·16	+3·47	+2·46	+1·87	+1·40	+1·01	+0·88	+0·75	+0·48	+0·07
July	-0·57	-1·20	-1·41	-1·97	-3·13	-4·68	*-5·23*	-4·91	-4·79	-3·20	-0·41	+2·37	+4·95	*+6·16*	+5·99	+4·93	+3·35	+2·00	+1·41	+0·79	-0·23	+0·02	-0·05	-0·19
Aug.	-1·09	-1·20	-1·46	-1·41	-1·84	-3·30	-3·91	-4·38	*-4·42*	-2·99	-0·66	+2·66	+5·29	*+6·24*	+5·36	+3·71	+2·02	+0·90	+0·47	+0·28	+0·42	+0·01	-0·12	-0·58
Sept.	-1·61	-0·71	-0·51	-1·15	-1·27	-1·66	-2·61	-3·43	*-3·61*	-2·41	-0·65	+2·57	+4·95	*+5·53*	+4·61	+3·23	+1·95	+1·30	+0·37	+0·01	-1·03	-0·77	-1·27	-1·83
Oct.	-1·46	-1·69	-1·21	-1·22	-1·11	-1·17	-1·88	-3·05	*-4·01*	-3·32	-0·69	+2·83	+4·42	*+4·91*	+4·23	+2·82	+1·47	+1·07	+0·88	+0·35	+0·03	-0·58	-0·57	-1·05
Nov.	-1·39	-1·00	-0·89	-0·92	-1·08	-1·11	-1·34	-1·38	*-1·69*	-1·50	+0·27	+2·34	*+3·29*	+3·00	+2·17	+1·44	+1·14	+0·93	+0·44	-0·24	-0·05	-0·60	-0·85	-0·98
Dec.	-1·04	-0·63	-0·38	-0·36	-0·64	-0·73	-0·64	-1·00	-0·84	-0·43	+0·34	+1·68	*+2·20*	+2·03	+1·60	+1·20	+1·02	+0·55	+0·10	-0·28	-0·58	-0·99	*-1·10*	-1·08
Year	-0·96	-0·98	-0·80	-0·96	-1·49	-2·02	-2·53	-2·99	*-3·16*	-2·27	-0·37	+2·17	+3·98	*+4·50*	+3·94	+2·72	+1·68	+0·97	+0·52	+0·15	-0·09	-0·42	-0·71	-0·90
Winter	-1·28	-0·93	-0·65	-0·63	-0·69	-0·81	-0·89	-1·12	*-1·33*	-1·13	+0·07	+1·64	+2·67	*+2·82*	+2·25	+1·45	+1·06	+0·73	+0·33	-0·14	-0·31	-0·93	-1·15	-1·02
Equinox	-0·83	-0·85	-0·43	-0·79	-1·33	-1·55	-2·43	-3·45	*-3·98*	-2·94	-0·65	+2·46	+4·66	*+5·21*	+4·46	+2·86	+1·45	+0·68	+0·31	+0·08	-0·31	-0·49	-0·80	-1·33
Summer	-0·76	-1·16	-1·32	-1·47	-2·44	-3·69	-4·25	*-4·39*	-4·18	-2·73	-0·52	+2·41	+4·60	*+5·47*	+5·11	+3·85	+2·53	+1·50	+0·93	+0·51	+0·34	+0·18	-0·16	-0·35

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	+0·16	+0·19	+0·19	+0·04	-0·04	-0·17	-0·14	-0·13	+0·12	+0·35	+0·31	*+0·42*	+0·27	+0·02	-0·10	-0·17	-0·25	*-0·32*	-0·30	-0·27	-0·19	+0·06	+0·08	-0·12
Feb.	+0·06	+0·11	+0·10	+0·04	-0·05	-0·26	-0·49	*-0·60*	-0·38	+0·15	+0·45	*+0·48*	+0·39	+0·11	+0·03	-0·06	+0·21	+0·07	-0·09	-0·18	-0·07	+0·05	-0·03	-0·06
Mar.	-0·28	-0·09	-0·08	-0·21	-0·37	-0·34	-0·38	-0·17	+0·41	+1·23	*+1·50*	+1·27	+0·92	+0·75	+0·34	+0·07	-0·13	-0·25	-0·55	-0·63	-0·60	-0·79	-0·75	*-0·85*
Apr.	-0·49	-0·31	-0·19	-0·18	+0·05	0·00	-0·01	+0·28	+0·69	+1·15	*+1·34*	+1·08	+0·76	+0·48	+0·02	-0·02	-0·36	-0·51	-0·40	-0·53	-0·60	*-0·76*	*-0·76*	-0·72
May	-0·29	-0·14	0·00	-0·01	-0·13	-0·01	+0·29	+0·49	+0·82	+0·95	*+1·13*	+0·81	+0·58	+0·30	-0·27	-0·01	-0·45	*-0·75*	-0·74	-0·68	-0·58	-0·57	-0·40	-0·35
June	-0·27	-0·07	-0·01	+0·03	-0·25	-0·12	+0·32	+0·49	+0·89	+1·12	*+1·37*	+1·34	+0·89	+0·31	+0·05	+0·03	-0·36	-0·72	*-1·11*	-1·07	-0·99	-0·71	-0·67	-0·50
July	-0·38	-0·21	-0·23	-0·20	-0·14	+0·04	+0·25	+0·47	+0·95	+1·37	*+1·81*	+1·68	+1·28	+0·64	-0·01	-0·56	-0·67	-0·74	-1·01	*-1·23*	-1·08	-0·74	-0·68	-0·61
Aug.	-0·34	-0·23	-0·27	-0·15	-0·21	-0·05	+0·39	+0·89	+1·33	+1·81	*+1·88*	+1·50	+0·87	+0·27	-0·19	-0·53	-0·69	-0·97	*-0·99*	-0·91	-0·94	-0·89	-0·82	-0·75
Sept.	-0·27	-0·32	-0·37	-0·35	-0·38	-0·39	-0·19	+0·29	+0·94	+1·57	*+1·69*	+1·40	+0·68	+0·22	+0·13	-0·06	-0·11	-0·35	-0·59	-0·70	-0·63	-0·64	*-0·79*	-0·77
Oct.	-0·26	-0·30	-0·21	-0·41	-0·43	-0·50	-0·38	+0·01	+0·72	+1·48	*+1·88*	+1·72	+1·31	+0·70	+0·13	-0·13	-0·30	-0·64	-0·72	-0·79	*-0·80*	-0·73	-0·74	-0·63
Nov.	+0·01	+0·07	+0·08	-0·08	-0·22	-0·30	*-0·43*	-0·39	-0·06	+0·44	*+0·69*	+0·68	+0·47	+0·31	+0·21	+0·20	+0·01	-0·25	-0·31	-0·31	-0·29	-0·20	-0·22	-0·12
Dec.	*+0·38*	+0·19	+0·06	+0·14	-0·04	-0·15	-0·19	-0·14	-0·01	+0·07	+0·22	+0·20	+0·09	+0·05	+0·07	+0·03	-0·09	-0·03	-0·20	*-0·27*	-0·17	-0·17	-0·07	+0·04
Year	-0·16	-0·10	-0·08	-0·11	-0·18	-0·18	-0·08	+0·12	+0·54	+0·98	*+1·19*	+1·05	+0·71	+0·35	+0·03	-0·10	-0·27	-0·46	-0·58	*-0·63*	-0·58	-0·51	-0·49	-0·45
Winter	+0·15	+0·14	+0·11	+0·04	-0·09	-0·22	*-0·32*	-0·31	-0·08	+0·26	+0·42	*+0·45*	+0·30	+0·12	+0·06	0·00	-0·03	-0·13	-0·22	-0·26	-0·18	-0·07	-0·06	-0·07
Equinox	-0·32	-0·26	-0·21	-0·29	-0·29	-0·31	-0·24	+0·10	+0·69	+1·36	*+1·60*	+1·37	+0·92	+0·53	+0·16	-0·04	-0·23	-0·43	-0·57	-0·66	-0·66	-0·73	*-0·76*	-0·74
Summer	-0·32	-0·16	-0·13	-0·09	-0·18	-0·03	+0·31	+0·59	+1·00	+1·31	*+1·55*	+1·33	+0·91	+0·38	-0·11	-0·26	-0·55	-0·79	*-0·97*	*-0·97*	-0·90	-0·73	-0·64	-0·55

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-1·8	-2·2	-2·4	-0·6	+0·4	+1·9	+1·6	+1·2	-2·4	-5·2	-5·2	*-6·6*	-4·2	0·0	+2·2	+2·6	+3·4	*+4·5*	+4·4	+4·0	+2·8	0·0	-0·4	+2·0
Feb.	-1·4	-2·1	-1·9	-0·8	+0·5	+3·5	+6·6	*+7·9*	+5·1	-2·2	-7·7	*-9·3*	-8·0	-3·5	-1·3	+1·8	-1·3	+0·9	+2·8	+3·9	+2·3	+0·8	+1·9	+1·5
Mar.	+4·3	+1·8	+1·9	+3·3	+5·5	+5·2	+5·9	+2·9	-6·3	-18·4	*-24·3*	-22·1	-16·9	-12·8	-4·7	+0·7	+4·1	+5·6	+9·3	+10·3	+9·7	*+12·4*	+11·1	+11·5
Apr.	+7·2	+4·8	+3·2	+2·8	0·0	+1·1	+1·2	-3·2	-10·2	-18·2	*-22·6*	-20·6	-16·2	-9·6	-0·6	+1·0	+6·6	+9·3	+8·2	+9·4	+10·0	*+12·4*	*+12·4*	+11·6
May	+3·9	+2·1	+0·5	+0·7	+2·9	+1·2	-3·5	-7·1	-12·9	-16·7	*-20·7*	-16·9	-13·7	-7·5	+2·7	+0·7	+8·5	+13·8	*+13·9*	+12·7	+10·9	+10·7	+7·7	+6·1
June	+5·0	+2·1	+1·5	+1·0	+4·5	+2·9	-4·2	-7·3	-13·7	-19·2	-24·9	*-25·1*	-18·2	-7·7	-2·3	-0·8	+6·5	+12·9	*+19·0*	+18·7	+17·1	+12·6	+11·1	+8·5
July	+6·6	+4·3	+4·8	+4·9	+4·5	+2·2	-2·1	-6·9	-14·6	-22·5	*-30·4*	-30·1	-24·4	-13·7	-2·8	+7·3	+10·9	+13·4	+17·1	*+19·9*	+17·8	+12·5	+11·2	+10·1
Aug.	+5·7	+4·3	+4·9	+5·3	+4·3	+2·4	-3·9	-11·5	-18·9	-28·1	*-31·3*	-27·7	-18·3	-7·7	+0·7	+8·1	+11·9	+16·0	*+16·3*	+14·9	+14·9	+14·3	+13·3	+12·1
Sept.	+5·4	+5·6	+6·0	+5·8	+6·4	+6·7	+4·4	-2·8	-13·4	-24·0	*-27·4*	-25·2	-15·2	-7·0	-3·6	+0·8	+2·4	+6·5	+10·4	+11·6	+10·6	+11·2	*+12·8*	+12·0
Oct.	+4·3	+4·5	+3·1	+5·7	+5·9	+7·2	+6·1	+0·9	-8·5	-21·3	*-28·7*	-27·3	-21·1	-11·5	-1·9	+3·1	+5·5	+9·6	+10·7	*+11·3*	*+11·3*	+10·9	+10·9	+9·3
Nov.	+0·3	-0·5	-0·7	+1·5	+3·3	+4·0	*+5·7*	+5·1	+0·1	-7·5	-11·7	*-12·1*	-8·1	-4·5	-2·3	-1·9	+0·7	+4·4	+4·9	+4·9	+4·5	+3·7	+3·9	+2·3
Dec.	*-4·7*	-2·3	-0·5	-1·9	+0·7	+1·9	+2·3	+1·1	-0·9	-2·1	-4·5	-3·9	-1·9	-0·7	-0·5	+0·5	+2·1	+1·1	+3·5	*+4·3*	+2·7	+2·7	+1·3	-0·3
Year	+2·9	+1·9	+1·7	+2·1	+3·2	+3·3	+1·7	-1·6	-8·1	-15·5	*-19·9*	-18·9	-13·9	-7·2	-1·2	+2·0	+5·1	+8·2	+10·0	*+10·5*	+9·5	+8·7	+8·1	+7·2
Winter	-1·9	-1·8	-1·4	-0·5	+1·2	+2·8	+4·1	+3·8	+0·5	-4·3	-7·3	*-8·0*	-5·5	-2·2	-0·5	+0·7	+1·2	+2·7	+3·9	*+4·3*	+3·1	+1·8	+1·7	+1·4
Equinox	+5·3	+4·2	+3·5	+4·4	+4·5	+5·1	+4·4	-0·5	-9·6	-20·5	*-25·7*	-23·8	-17·3	-10·2	-2·7	+1·4	+4·7	+7·7	+9·7	+10·7	+10·4	+11·7	*+11·8*	+11·1
Summer	+5·3	+3·2	+2·9	+2·5	+4·1	+2·2	-3·4	-8·2	-15·0	-21·6	*-26·8*	-24·9	-18·7	-9·1	-0·4	+3·8	+9·5	+14·0	*+16·6*	+16·5	+15·2	+12·5	+10·8	+9·2

DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cycle change)

154 ESKDALEMUIR 1945

NORTH COMPONENT

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+4·7	+5·7	+1·1	+10·0	+11·0	*+13·7*	+9·2	+1·9	−2·8	+0·7	*−13·5*	−10·7	−11·7	+0·7	−4·5	0·0	−1·2	−4·3	−1·0	−3·2	−7·4	+0·5	+1·8	−1·0
Feb.	+8·1	+12·8	+5·3	+4·8	+5·7	+13·1	*‡15·8*	+6·0	+2·8	−10·9	−12·7	*−13·1*	−10·9	−6·6	−9·9	−10·1	−9·1	−7·4	+3·7	−4·0	+3·5	+1·8	+4·7	+6·7
Mar.	*+39·9*	+4·7	−10·8	+3·2	+14·6	+15·8	+21·4	+2·9	−7·1	−15·2	−15·1	*−22·9*	−5·2	−9·0	−14·3	−5·8	−2·5	−0·1	−6·6	+4·3	+2·7	−11·3	+8·4	+7·9
Apr.	+12·5	+2·1	+3·4	+9·0	+11·3	+18·0	+11·7	−1·7	−12·1	−30·9	*−32·9*	−22·7	−29·7	−21·3	−7·3	−9·7	+0·3	+19·1	+12·7	+11·7	*+22·1*	+7·4	+9·4	+17·7
May	+10·1	+10·2	+6·4	+1·1	+6·4	+6·6	+2·1	−4·1	−12·3	−25·2	−30·1	*−32·5*	−28·2	−22·4	−10·8	−0·7	+15·1	+19·2	+17·9	+20·2	*+22·2*	+14·3	+7·1	+7·5
June	+9·5	+2·3	+3·6	+1·9	+8·1	+1·3	+0·3	−7·3	−7·7	−16·1	−32·5	*−36·8*	−25·4	−18·2	−7·0	+7·5	+5·7	+16·2	*+27·3*	+22·1	+16·8	+12·8	+8·3	+7·2
July	+16·2	+12·5	+6·8	+11·3	+8·9	+12·7	+3·5	−18·6	−21·1	−29·1	−29·7	*−31·2*	−30·5	−13·3	−14·8	+10·9	+17·8	*+22·6*	+18·3	+18·9	+14·5	+5·5	+6·8	+1·3
Aug.	+20·9	+15·5	*+24·5*	−1·1	+3·8	+11·9	+1·8	−8·4	−23·7	*−37·5*	−36·3	−31·7	−20·0	−14·0	−12·2	−8·7	+1·1	+11·6	+21·7	+16·9	+17·5	+13·8	+16·5	+15·9
Sept.	+19·2	*+20·0*	+12·4	+15·7	+13·6	+5·4	+10·4	−8·3	−20·3	−27·2	−32·8	*−35·0*	−20·9	−10·0	+1·5	+2·9	+15·6	+7·2	−1·3	+3·7	+7·9	+10·9	+4·4	+4·9
Oct.	−6·8	+4·2	+5·8	+16·7	+21·6	*+22·5*	+17·6	+17·7	+4·9	−15·2	−20·0	*−35·2*	−32·2	−11·7	−1·2	−7·5	−1·5	+1·0	+0·2	−4·1	+15·3	+6·6	+2·3	−0·9
Nov.	+8·0	+4·7	+6·0	+5·9	+16·6	+10·3	+3·8	+3·1	+1·5	−19·2	*−25·6*	−19·5	−13·4	−10·9	−7·3	−5·2	−2·1	−4·1	−3·1	+1·5	+7·3	+7·4	*+25·5*	+8·5
Dec.	−8·2	*−17·5*	−4·1	+6·7	*+21·0*	+12·7	+5·9	−1·3	+4·3	−7·4	−12·1	−13·8	−17·3	−0·8	+8·9	+6·3	−6·7	−1·5	−0·6	+9·8	+3·7	−3·0	+5·9	+9·2
Year	+11·2	+6·5	+5·0	+7·1	+11·9	*+12·0*	+8·7	−1·5	−7·8	−19·4	−24·5	*−25·5*	−20·5	−11·5	−6·7	−1·7	+2·7	+6·6	+7·5	+8·1	+10·5	+5·6	+8·4	+7·1
Winter	+3·1	+1·4	+2·1	+6·8	*+13·8*	+12·4	+8·7	+2·4	+1·4	−9·1	*−16·0*	−14·2	−13·3	−4·4	−3·2	−2·2	−4·7	−4·3	−0·2	+1·1	+1·7	+1·7	+9·5	+5·9
Equinox	*+16·2*	+7·7	+2·7	+11·2	+15·2	+15·4	+15·3	+2·6	−8·7	−22·1	−25·2	*−28·9*	−22·0	−13·1	−5·3	−5·0	+2·9	+6·8	+1·2	+3·9	+12·0	+3·4	+6·1	+7·4
Summer	+14·2	+10·2	+10·4	+3·3	+6·8	+8·1	+1·9	−9·6	−16·2	−27·0	−32·2	*−33·1*	−26·0	−16·9	−11·2	+2·3	+9·9	+17·4	*+21·3*	+19·5	+17·8	+11·6	+9·7	+7·9

WEST COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	*−28·3*	−23·8	−21·6	−14·9	−13·6	+1·6	+10·2	+16·0	+10·3	+13·5	+11·6	+17·7	+21·7	*+24·3*	+21·4	+16·8	+9·6	−17·4	−1·1	−13·1	−11·6	−16·2	−3·0	−10·1
Feb.	+3·1	+3·0	−11·1	−10·2	−5·5	+8·1	+2·5	−2·6	−1·4	−3·9	+4·9	+13·5	+20·2	+27·0	*+29·7*	+15·9	+15·7	+7·1	−20·1	−13·1	*−28·1*	−26·9	−17·0	−10·7
Mar.	−5·4	*−32·2*	−31·7	−6·3	−13·3	−0·5	+2·3	+6·4	−2·4	+1·2	+6·8	+19·6	+29·9	*+42·3*	+33·1	+31·5	+29·1	+14·1	−23·2	−21·6	−20·3	−16·0	−22·1	−21·4
Apr.	−10·0	−8·4	+8·5	−5·3	−12·9	−8·5	−5·6	*−22·8*	−20·1	−12·8	+3·1	+17·5	*+39·3*	+34·4	+36·0	+29·1	+9·5	−7·7	−2·2	−2·7	−11·6	−6·3	−18·1	−22·5
May	−6·0	−8·4	−11·5	+3·6	−4·1	−12·1	−21·8	*−29·4*	−28·1	−20·5	−4·7	+11·2	+26·4	+33·5	*+35·7*	+31·4	+26·7	+16·7	+7·2	+3·1	−11·7	−19·9	−11·9	−5·5
June	−6·5	−8·6	−3·5	−7·5	−11·9	−21·0	−29·0	*−32·4*	−28·8	−21·6	−12·5	+5·7	+19·3	+28·1	*+29·4*	+28·9	+23·5	+19·7	+19·0	+12·5	+1·0	−3·7	−0·7	+0·8
July	−11·3	−12·3	−19·6	*−23·7*	−13·7	−19·7	−18·0	−22·7	−15·3	−10·0	−0·7	+7·1	+16·3	*+30·1*	*+30·1*	+25·1	+26·3	+21·1	+11·8	+16·7	+3·3	−1·6	−7·7	−11·6
Aug.	−1·9	−5·6	−22·5	*−29·1*	−20·5	−22·3	−25·2	−19·9	−19·2	−10·2	+2·3	+17·8	+32·9	*+37·2*	+30·9	+25·1	+14·8	+11·2	+0·8	+1·4	−1·7	+5·0	+2·4	−3·6
Sept.	−6·5	+0·3	−6·8	−10·3	−7·8	−10·6	−14·0	−14·5	−10·7	−12·3	+5·1	+16·0	+33·2	+34·8	*+39·7*	+30·9	+9·1	+1·6	−1·6	−2·2	−17·9	−16·4	−19·5	*−19·6*
Oct.	−33·9	*−47·3*	−26·1	−25·8	−3·6	−5·2	−1·0	+1·0	−4·5	+1·6	+20·6	+29·9	+39·3	+44·5	*+45·5*	+36·3	+20·4	+7·3	−12·4	−8·9	−19·5	−26·4	−19·4	−12·4
Nov.	−13·4	−9·9	−7·1	−5·8	−1·2	+5·8	+19·2	*+23·5*	+6·3	−0·7	+12·7	+11·8	+15·7	+19·7	+10·3	+6·9	−2·7	−2·3	−9·5	*−28·8*	−25·5	−12·0	−4·5	−8·3
Dec.	−23·3	−17·7	−23·3	*−27·6*	−27·4	−1·2	+14·0	+15·3	+9·3	+6·9	+19·8	+18·1	+18·9	*+31·1*	+19·8	+24·2	+6·1	+0·1	−8·9	−19·5	−6·1	−8·7	−9·7	−10·0
Year	−12·0	−14·3	*−14·7*	−13·6	−11·3	−7·1	−5·5	−6·9	−8·7	−5·7	+5·7	+15·5	+26·1	*+32·3*	+30·1	+25·2	+15·7	+5·9	−3·3	−6·3	−12·5	−12·4	−11·0	−11·3
Winter	−15·5	−12·1	−15·8	−14·6	−11·9	+3·6	+11·5	+13·0	+6·1	+3·9	+12·2	+15·3	+19·1	*+25·5*	+20·3	+15·9	+7·2	−3·1	−9·9	*−18·6*	−17·8	−15·9	−8·5	−9·8
Equinox	−13·9	*−21·9*	−14·0	−11·9	−9·4	−6·2	−4·6	−7·4	−9·4	−5·5	+8·9	+20·7	+35·4	*+39·0*	+38·6	+32·0	+17·0	+3·8	−9·9	−8·8	−17·3	−16·3	−19·7	−19·0
Summer	−6·4	−8·7	−14·3	−14·1	−12·5	−18·8	−23·5	*−26·1*	−22·9	−15·6	−3·9	+10·5	+23·7	*+32·2*	+31·5	+27·6	+22·8	+17·2	+9·7	+8·4	−2·3	−5·1	−4·5	−5·0

VERTICAL COMPONENT

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	−23·2	−24·3	−25·4	−30·9	*−37·1*	−18·4	−11·3	−12·3	−10·2	−5·1	−1·2	+0·3	+2·6	+5·7	+12·8	+18·3	*+34·3*	+30·6	+33·9	+26·5	+11·4	+14·1	+7·6	+1·3
Feb.	−11·2	*−19·9*	−15·6	−10·3	−7·7	−12·6	−14·5	−10·5	−8·4	−2·9	−5·6	−4·7	−4·8	−2·9	+3·8	+17·9	+21·9	+21·0	*+24·5*	+17·5	+16·8	+8·1	+2·6	−2·5
Mar.	−33·4	−49·3	*−52·6*	−34·3	−24·5	−19·8	−19·9	−15·5	−12·0	−7·3	−7·0	−3·1	−2·6	+7·5	+30·6	+47·9	+50·7	+59·0	*+60·3*	+43·5	+15·2	+4·5	−14·0	−23·9
Apr.	−15·9	−20·4	*−21·1*	−20·0	−12·2	−11·7	−11·0	−8·0	−7·9	−6·8	−9·5	−10·4	−5·5	+17·6	+22·5	+32·2	+34·8	*+35·3*	+28·2	+21·8	+11·5	−5·6	−18·1	−19·8
May	−1·8	−6·8	−8·5	−15·2	*−17·6*	−13·4	−11·6	−9·6	−8·9	−10·0	−13·0	−13·6	−12·0	−3·8	+4·7	+12·6	+19·4	+23·6	*+24·4*	+23·0	+18·5	+12·0	+5·4	+2·2
June	−6·2	−10·0	−13·3	−15·8	*−20·6*	−13·8	−10·6	−6·8	−6·5	−7·2	−8·0	−10·8	−9·6	−5·6	+1·7	+10·8	+20·4	+23·2	*+25·0*	+24·6	+20·1	+13·0	+6·2	−0·2
July	−8·0	−9·1	−16·7	−22·4	−26·5	−28·9	*−30·0*	−22·3	−12·3	−11·2	−7·9	−5·5	+0·4	+5·7	+10·7	+16·2	+20·1	+28·9	*+30·4*	+26·3	+24·9	+18·8	+12·1	+6·3
Aug.	−1·8	−14·7	−34·8	*−54·0*	−33·2	−11·1	−2·2	−2·4	−2·6	−2·3	−3·6	−6·8	−4·2	+4·5	+13·2	+21·8	*+26·6*	+25·9	+24·8	+20·2	+13·6	+10·7	+7·4	+5·0
Sept.	−12·6	−29·5	*−32·9*	−29·6	−21·9	−14·9	−10·6	−5·1	−5·5	−4·8	−6·9	−6·3	−4·4	+4·5	+16·7	+29·2	+47·3	*+47·7*	+29·8	+22·7	+18·9	−1·8	−12·5	−17·5
Oct.	−40·3	*−50·4*	−35·8	−31·9	−24·8	−16·4	−10·1	−8·4	−5·4	−8·5	−15·0	−6·6	−1·7	+11·2	+30·6	+32·7	+32·6	+38·8	+37·5	*+42·0*	+23·0	+11·7	+5·0	−9·8
Nov.	−2·4	−6·6	−13·6	−18·6	−14·0	−13·9	−16·4	*−18·8*	−11·8	−3·8	−1·2	+3·2	+7·0	+9·4	+13·4	+15·8	*+18·8*	+18·7	*+18·8*	+17·0	+8·0	+4·2	−2·0	−11·2
Dec.	+0·5	−11·8	−17·1	−15·2	−21·8	−32·1	*−33·0*	−26·6	−22·9	−12·6	−9·3	−2·6	+5·7	+12·2	+25·1	+15·2	+18·8	+22·5	*+30·0*	+29·4	+18·1	+14·6	+9·1	+3·8
Year	−13·0	−21·1	−23·9	*−24·9*	−21·8	−17·3	−15·1	−12·2	−9·5	−6·9	−7·3	−5·6	−2·4	+5·5	+15·5	+22·5	+28·8	*+31·3*	+30·6	+26·2	+16·7	+8·7	+0·7	−5·5
Winter	−9·1	−15·7	−17·9	−18·7	*−20·1*	−19·3	−18·8	−17·1	−13·3	−6·1	−4·3	−0·9	+2·6	+6·1	+13·8	+16·8	+23·5	+23·2	*+26·8*	+22·6	+13·6	+10·3	+4·3	−2·1
Equinox	−25·5	*−37·4*	−35·6	−28·9	−20·9	−15·7	−12·9	−9·3	−7·7	−6·9	−9·6	−6·6	−3·5	+10·2	+25·1	+35·5	+41·3	*+45·2*	+38·9	+32·5	+17·1	+2·2	−9·9	−17·7
Summer	−4·5	−10·1	−18·3	*−26·9*	−24·5	−16·8	−13·6	−10·3	−7·6	−7·7	−8·1	−9·2	−6·3	+0·2	+7·6	+15·3	+21·6	+25·4	*+26·1*	+23·5	+19·3	+13·6	+7·8	+3·3

INTERNATIONAL DISTURBED DAYS

Departures from the mean of the 24 hourly values (uncorrected for non-cycle change)

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DECLINATION (measured positive towards the west)

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-5·97	-5·10	-4·45	-3·47	-3·25	-0·28	+1·67	+3·17	+2·23	+2·72	+2·95	+4·09	+4·93	+4·92	+4·55	+3·41	+2·01	-3·36	-0·19	-2·53	-2·03	-3·32	-0·69	-2·01
Feb.	+0·27	+0·04	-2·49	-2·28	-1·38	+1·07	-0·20	-0·80	-0·41	-0·32	+1·57	+3·32	+4·59	+5·78	+6·47	+3·68	+3·60	+1·77	-4·24	-2·48	-5·87	-5·54	-3·67	-2·48
Mar.	-2·86	-6·76	-5·98	-1·42	-3·36	-0·79	-0·48	+1·18	-0·18	+0·92	+2·04	+5·00	+6·32	+9·00	+7·36	+6·68	+6·04	+2·87	-4·44	-4·58	-4·24	-2·76	-4·86	-4·70
Apr.	-2·59	-1·80	+1·59	-1·48	-3·12	-2·53	-1·66	-4·56	-3·55	-1·24	+2·09	+4·56	+9·33	+7·94	+7·65	+6·36	+1·92	-2·41	-1·00	-1·06	-3·35	-1·62	-4·11	-5·36
May	-1·67	-2·14	-2·62	+0·69	-1·12	-2·74	-4·53	-5·80	-5·16	-3·05	+0·38	+3·70	+6·61	+7·80	+7·74	+6·41	+4·76	+2·54	+0·67	-0·26	-3·36	-4·67	-2·74	-1·44
June	-1·74	-1·84	-0·86	-1·60	-2·78	-4·33	-5·90	-6·26	-5·52	-3·68	-1·12	+2·78	+5·04	+6·50	+6·28	+5·54	+4·52	+3·29	+2·66	+1·56	-0·54	-1·32	-0·52	-0·16
July	-3·01	-3·05	-4·29	-5·31	-3·17	-4·56	-3·81	-3·79	-2·17	-0·75	+1·17	+2·83	+4·65	+6·71	+6·77	+4·61	+4·55	+3·30	+1·59	+2·55	+0·03	-0·57	-1·87	-2·41
Aug.	-1·30	-1·83	-5·66	-5·86	-4·34	-5·05	-5·20	-3·68	-2·86	-0·41	+2·06	+5·02	+7·56	+8·17	+6·82	+5·48	+2·96	+1·77	-0·80	-0·46	-1·12	-0·41	-0·24	-1·44
Sept.	-2·17	-0·81	-1·93	-2·79	-2·19	-2·40	-3·31	-2·59	-1·27	-1·29	+2·49	+4·79	+7·67	+7·51	+8·01	+6·15	+1·15	0·00	-0·27	-0·61	-3·99	-3·81	-4·15	-4·19
Oct.	-6·60	-9·83	-5·57	-6·00	-1·69	-2·05	-0·98	-0·57	-1·13	+1·00	+5·07	+7·63	+9·42	+9·59	+9·33	+7·72	+4·23	+1·45	-2·54	-1·63	-4·65	-5·66	-4·05	-2·49
Nov.	-3·08	-2·21	-1·72	-1·45	-0·98	+0·73	+3·74	+4·63	+1·22	+0·69	+3·72	+3·25	+3·78	+4·49	+2·42	+1·63	-0·46	-0·29	-1·80	-5·93	-5·50	-2·77	-2·04	-2·07
Dec.	-4·38	-2·83	-4·56	-5·91	-6·51	-0·80	+2·59	+3·17	+1·70	+1·73	+4·56	+4·29	+4·60	+6·37	+3·64	+4·65	+1·53	+0·08	-1·79	-4·41	-1·40	-1·63	-2·24	-2·45
Year	-2·93	-3·18	-3·21	-3·07	-2·82	-1·98	-1·51	-1·33	-1·43	-0·31	+2·25	+4·27	+6·21	+7·07	+6·42	+5·19	+3·07	+0·92	-1·01	-1·65	-3·00	-2·77	-2·60	-2·60
Winter	-3·29	-2·53	-3·31	-3·28	-3·03	+0·18	+1·95	+2·54	+1·19	+1·21	+3·20	+3·74	+4·47	+5·39	+4·27	+3·34	+1·67	-0·45	-2·01	-3·84	-3·70	-3·31	-2·16	-2·25
Equinox	-3·55	-4·80	-2·97	-2·92	-2·59	-1·94	-1·61	-1·63	-1·53	-0·15	+2·92	+5·49	+8·19	+8·51	+8·09	+6·73	+3·33	+0·48	-2·06	-1·97	-4·06	-3·46	-4·29	-4·19
Summer	-1·93	-2·21	-3·36	-3·02	-2·85	-4·17	-4·86	-4·88	-3·93	-1·97	+0·62	+3·58	+5·97	+7·29	+6·90	+5·51	+4·20	+2·73	+1·03	+0·85	-1·25	-1·54	-1·34	-1·36

INCLINATION

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
Jan.	-0·48	-0·64	-0·39	-1·21	-1·45	-1·38	-1·03	-0·66	-0·22	-0·37	+0·69	+0·46	+0·52	-0·26	+0·31	+0·21	+0·79	+1·29	+0·92	+1·05	+0·94	+0·55	+0·11	+0·24
Feb.	-0·86	-1·38	-0·58	-0·42	-0·49	-1·29	-1·44	-0·62	-0·37	+0·70	+0·63	+0·55	+0·31	-0·03	+0·32	+0·88	+0·92	+0·91	+0·65	+0·89	+0·59	+0·46	0·00	-0·35
Mar.	-3·38	-1·07	-0·14	-0·97	-1·38	-1·52	-1·94	-0·67	+0·21	+0·80	+0·72	+1·15	-0·15	+0·17	+1·22	+1·12	+1·00	+1·27	+2·26	+1·11	+0·49	+1·08	-0·58	-0·81
Apr.	-1·07	-0·53	-0·87	-1·01	-0·86	-1·35	-0·97	+0·24	+0·89	+2·05	+1·89	+0·99	+1·26	+1·35	+0·52	+1·02	+0·71	-0·27	-0·10	-0·19	-1·00	-0·54	-0·81	-1·33
May	-0·63	-0·72	-0·47	-0·50	-0·80	-0·59	-0·11	+0·45	+0·99	+1·71	+1·73	+1·65	+1·19	+0·90	+0·32	-0·09	-0·89	-0·92	-0·68	-0·81	-0·83	-0·36	-0·16	-0·36
June	-0·69	-0·27	-0·52	-0·41	-0·87	-0·13	+0·13	+0·77	+0·76	+1·19	+2·12	+2·08	+1·16	+0·66	+0·08	-0·64	-0·21	-0·77	-1·45	-1·02	-0·62	-0·47	-0·39	-0·49
July	-1·10	-0·87	-0·58	-0·96	-1·05	-1·27	-0·72	+1·00	+1·31	+1·78	+1·77	+1·82	+1·79	+0·59	+0·81	-0·68	-1·05	-1·08	-0·62	-0·83	-0·39	+0·13	-0·04	+0·24
Aug.	-1·39	-1·31	-2·16	-0·85	-0·78	-0·74	+0·19	+0·78	+1·77	+2·56	+2·27	+1·66	+0·75	+0·50	+0·69	+0·76	+0·38	-0·28	-0·83	-0·63	-0·79	-0·72	-0·93	-0·87
Sept.	-1·49	-2·05	-1·54	-1·62	-1·33	-0·57	-0·75	+0·63	+1·35	+1·85	+1·92	+1·92	+0·79	+0·27	-0·25	+0·09	+0·01	+0·68	+0·85	+0·35	+0·21	-0·53	-0·32	-0·47
Oct.	-0·07	-0·85	-0·90	-1·53	-1·99	-1·82	-1·40	-1·39	-0·39	+0·77	+0·65	+1·73	+1·52	+0·42	+0·19	+0·79	+0·62	+0·79	+1·09	+1·44	-0·16	+0·23	+0·25	-0·01
Nov.	-0·40	-0·33	-0·63	-0·77	-1·43	-1·11	-0·93	-1·01	-0·48	+1·18	+1·48	+1·20	+0·83	+0·67	+0·67	+0·63	+0·64	+0·77	+0·80	+0·73	+0·08	-0·21	-1·67	-0·72
Dec.	+0·88	+1·11	+0·18	-0·42	-1·53	-1·62	-1·40	-0·79	-0·98	+0·08	+0·29	+0·59	+1·01	-0·09	-0·25	-0·39	+0·82	+0·65	+0·91	+0·36	+0·29	+0·69	-0·02	-0·37
Year	-0·89	-0·75	-0·71	-0·89	-1·16	-1·12	-0·87	-0·11	+0·40	+1·19	+1·35	+1·32	+0·92	+0·43	+0·39	+0·31	+0·31	+0·26	+0·31	+0·21	-0·10	+0·03	-0·38	-0·44
Winter	-0·21	-0·31	-0·36	-0·71	-1·24	-1·35	-1·20	-0·77	-0·51	+0·39	+0·78	+0·70	+0·67	+0·08	+0·27	+0·34	+0·79	+0·91	+0·82	+0·75	+0·48	+0·37	-0·40	-0·30
Equinox	-1·50	-1·12	-0·86	-1·28	-1·39	-1·31	-1·26	-0·30	+0·52	+1·37	+1·29	+1·45	+0·86	+0·56	+0·42	+0·75	+0·59	+0·62	+1·03	+0·68	-0·11	+0·06	-0·37	-0·65
Summer	-0·95	-0·80	-0·93	-0·68	-0·88	-0·68	-0·13	+0·75	+1·21	+1·81	+1·98	+1·80	+1·22	+0·66	+0·48	-0·17	-0·44	-0·77	-0·90	-0·83	-0·66	-0·36	-0·38	-0·37

HORIZONTAL FORCE

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-1·4	+0·5	-3·5	+6·6	+7·9	+13·7	+11·2	+5·3	-0·5	+3·6	-10·7	-6·7	-6·8	+5·9	+0·1	+3·6	+0·9	-7·9	-1·2	-5·9	-9·7	-3·0	+1·1	-3·1
Feb.	+8·6	+13·1	+2·8	+2·5	+4·4	+14·5	+16·0	+5·3	+2·4	-11·5	-11·4	-9·9	-6·4	-0·7	-3·4	-6·5	-5·6	-5·7	-0·6	-6·7	-2·6	-3·9	+1·0	+4·3
Mar.	+37·9	-2·2	-17·3	+1·8	+11·4	+15·3	+21·4	+4·2	-7·5	-14·6	-13·3	-18·2	+1·3	+0·2	-6·9	+1·0	+3·8	+2·9	-11·4	-0·4	-1·7	-14·4	+3·5	+3·2
Apr.	+10·1	+0·3	+5·1	+7·7	+8·3	+15·8	+10·3	-6·5	-16·1	-32·9	-31·5	-18·5	-20·7	-13·5	+0·5	-3·3	+2·3	+17·0	+11·9	+10·9	+19·1	+5·9	+5·3	+12·5
May	+8·6	+8·2	+3·8	+1·8	+5·4	+3·9	-2·6	-10·2	-18·0	-29·0	-30·4	-29·4	-22·0	-14·8	-3·0	+6·0	+20·4	+22·3	+19·0	+20·4	+19·2	+9·8	+4·4	+6·2
June	+7·9	+0·4	+2·8	+0·3	+5·4	-3·2	-5·9	-14·0	-13·6	-20·3	-34·4	-34·8	-20·7	-11·8	-0·6	+13·5	+10·6	+20·0	+30·7	+24·2	+16·6	+11·7	+8·0	+7·2
July	+13·4	+9·6	+2·5	+6·0	+5·8	+8·2	-0·4	-23·0	-23·9	-30·6	-29·2	-29·0	-26·4	-6·6	-8·1	+16·0	+23·0	+26·6	+20·4	+22·0	+14·9	+5·0	+5·0	-1·2
Aug.	+20·0	+14·0	+19·2	-7·2	-0·6	+6·9	-3·6	-12·4	-27·2	-38·8	-35·0	-27·2	-12·6	-5·8	-5·4	-3·2	+4·2	+13·7	+21·4	+16·8	+16·8	+14·6	+16·6	+14·8
Sept.	+17·4	+19·6	+10·7	+13·2	+11·6	+3·0	+7·2	-11·2	-22·1	-29·2	-31·0	-30·8	-13·4	-2·4	+9·9	+9·4	+17·2	+7·4	-1·6	+3·2	+3·9	+7·2	+0·2	+0·6
Oct.	-13·8	-5·9	+0·2	+10·9	+20·4	+20·9	+17·0	+17·5	+3·8	-14·5	-15·2	-28·1	-23·2	-2·1	+8·4	+0·3	+2·8	+2·5	-2·4	-5·9	+10·8	+0·9	-1·8	-3·5
Nov.	+5·0	+2·5	+4·4	+4·6	+16·0	+11·3	+7·8	+8·0	+2·8	-18·9	-22·4	-16·6	-9·8	-6·5	-5·0	-3·6	-2·6	-4·5	-5·0	-4·6	+1·8	+4·7	+24·0	+6·6
Dec.	-12·9	-20·8	-8·9	+0·7	+14·7	+12·2	+8·7	+1·9	+6·1	-5·8	-7·7	-9·7	-12·9	+5·8	+12·9	+11·3	-5·3	-1·4	-2·5	+5·5	+2·3	-4·8	+3·7	+6·9
Year	+8·4	+3·3	+1·8	+4·1	+9·2	+10·2	+7·3	-2·9	-9·5	-20·2	-22·7	-21·6	-14·5	-4·4	-0·1	+3·7	+6·0	+7·7	+6·6	+6·6	+7·6	+2·8	+5·9	+4·5
Winter	-0·2	-1·2	-1·3	+3·6	+11·0	+12·9	+10·9	+5·1	+2·7	-8·1	-13·1	-10·7	-9·0	+1·1	+1·1	+1·2	-3·1	-4·9	-2·3	-2·9	-2·1	-1·7	+7·5	+3·7
Equinox	+12·9	+2·9	-0·3	+8·4	+12·9	+13·7	+14·0	+1·0	-10·5	-22·8	-22·7	-23·9	-14·0	-4·5	+3·0	+1·9	+6·5	+7·5	-0·9	+1·9	+8·0	-0·1	+1·8	+3·2
Summer	+12·5	+8·1	+7·1	+0·2	+4·0	+3·9	-3·1	-14·9	-20·7	-29·7	-32·3	-30·1	-20·4	-9·7	-4·3	+8·1	+14·5	+20·7	+22·9	+20·9	+16·9	+10·3	+8·5	+6·7

RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1945

The ranges are derived from the diurnal inequalities printed in Tables 150 to 155

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	All days			Quiet days			Disturbed days			All days			Quiet days			Disturbed days		
	N	W	V	N	W	V	N	W	V	D	I	H	D	I	H	D	I	H
	γ	γ	γ	γ	γ	γ	γ	γ	γ	′	′	γ	′	′	γ	′	′	γ
Jan.	12·5	24·3	18·2	12·2	18·9	4·2	27·2	52·6	71·4	5·25	1·01	11·2	3·98	0·74	11·1	10·90	2·74	24·4
Feb.	21·5	31·2	18·1	19·1	26·8	11·1	28·9	57·8	44·4	6·79	1·45	20·3	5·71	1·08	17·2	12·34	2·36	27·5
Mar.	34·8	40·2	35·5	38·1	39·8	14·6	62·8	74·5	112·9	9·08	2·16	30·3	8·76	2·35	36·7	15·76	5·64	56·1
Apr.	40·6	46·7	26·0	34·0	46·8	19·5	55·0	62·1	56·4	10·11	2·11	37·2	9·93	2·10	35·0	14·69	3·40	52·0
May	43·7	50·9	30·5	33·3	43·0	21·6	54·7	65·1	42·0	10·70	2·35	44·5	9·02	1·88	34·6	13·60	2·65	52·7
June	45·0	49·7	23·1	43·7	42·1	22·0	64·1	61·8	45·6	10·41	2·59	46·0	8·72	2·48	44·1	12·76	3·57	65·5
July	50·2	52·6	22·9	50·4	53·2	22·3	53·8	53·8	60·4	11·06	2·95	50·7	11·39	3·04	50·3	12·08	3·09	57·2
Aug.	44·4	52·9	26·2	45·4	52·5	19·8	62·0	66·3	80·6	11·27	2·71	44·8	10·66	2·87	47·6	14·03	4·72	60·2
Sept.	40·1	45·6	22·1	41·0	44·3	18·0	55·0	59·3	80·6	9·61	2·29	36·7	9·14	2·48	40·2	12·20	3·97	50·6
Oct.	38·1	42·3	23·6	40·8	41·3	10·7	57·7	92·8	92·4	9·42	2·15	33·0	8·92	2·68	40·0	19·42	3·72	49·0
Nov.	20·4	24·1	13·9	21·1	22·3	8·4	51·1	52·3	37·6	5·33	1·28	18·1	4·98	1·12	17·8	10·56	3·15	46·4
Dec.	15·1	28·9	20·4	10·0	15·8	5·8	38·5	58·7	63·0	6·16	1·17	14·7	3·30	0·65	9·0	12·88	2·73	35·5
Year	30·8	36·7	20·3	30·8	36·2	12·9	37·5	47·0	56·2	7·82	1·55	28·2	7·66	1·82	30·4	10·28	2·51	32·9
Winter	16·9	25·9	15·5	14·4	19·2	5·9	29·8	44·1	46·9	5·62	1·09	15·0	4·15	0·77	12·3	9·23	2·26	26·0
Equinox	37·4	43·3	25·9	38·1	43·0	13·6	45·1	60·9	82·6	9·29	1·99	32·8	9·19	2·36	37·5	13·31	2·95	37·9
Summer	45·2	50·7	25·4	42·4	46·7	20·3	54·4	58·3	53·0	10·83	2·56	46·1	9·86	2·52	43·4	12·17	2·93	55·2

NON-CYCLIC CHANGE

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	All days			Quiet days			Disturbed days		
	H	D	V	H	D	V	H	D	V
	γ	′	γ	γ	′	γ	γ	′	γ
Jan.	+0·8	+0·07	0·0	+3·5	+0·42	-2·2	+1·6	+2·01	+10·2
Feb.	+0·1	-0·05	0·0	+2·1	+0·97	+1·3	-1·5	-0·50	-1·1
Mar.	+1·0	-0·18	-0·4	+5·9	-1·38	-4·7	-28·1	-0 86	-4·7
Apr.	+0·5	+0·21	+0·3	+3·4	-0·17	+1·2	-5·9	-1·16	-13·3
May	-0·1	-0·08	+0·1	+2·6	-0·25	+1·3	-0·1	+0·68	+0·2
June	+0·3	-0·11	-0·2	+0·4	-0·34	-0·2	-1·1	-0·36	-2·5
July	-0·4	+0·08	+0·1	+1·9	+0·24	-0·1	-17·1	-0·11	+1·8
Aug.	0·0	-0·10	0·0	+5·8	+0·35	-1·3	-7·8	-0·29	+0·6
Sept.	-0·3	-0·13	-0·1	+5·0	-0·14	-2·6	-17·6	-1·24	-9·2
Oct.	0·0	+0·09	+0·2	+4·3	+0·13	-2·1	+9·8	+3·60	+11·9
Nov.	+0·1	+0·05	0·0	+1·5	+0·47	0·0	-2·7	0·00	-10·5
Dec.	-0·1	-0·05	+0·1	+4·1	+0·62	-2·4	+7·2	+3·29	-1·9
Year	+0·2	-0·02	0·0	+3·4	+0·08	-1·0	-5·3	+0·42	-1·5
Winter	+0·2	+0·01	0·0	+2·8	+0·62	-0·8	+1·1	+1·20	-0·8
Equinox	+0·3	-0·01	0·0	+4·7	-0·39	-2·1	-10·5	+0·09	-3·8
Summer	-0·1	-0·05	0·0	+2·7	0·00	-0·1	-6·5	-0·02	0·0

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS

For all, a, quiet, q, and disturbed, d, days for H, D and V and for all days for N, W, I and T

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	Horizontal force			Declination (west)			Vertical force			North component all days	West component all days	Inclination (north) all days	Total force all days
	a	q	d	a	q	d	a	q	d				
	16,000γ +			12° +			44,000γ +						
	γ	γ	γ	′	′	′	γ	γ	γ	γ	γ	° ′	γ
Jan.	518	521	507	18·1	18·2	17·1	1107	1108	1107	16139	3520	69 53·2	48037
Feb.	523	527	518	17·6	17·6	17·0	1106	1105	1108	16144	3518	69 52·9	48037
Mar.	520	523	513	16·8	17·0	16·0	1107	1107	1102	16142	3514	69 53·1	48037
Apr.	524	528	514	16·2	16·1	16·1	1105	1105	1107	16146	3512	69 52·8	48037
May	535	533	531	15·7	15·4	15·7	1104	1105	1105	16157	3512	69 52·1	48040
June	539	536	538	15·0	15·0	15·2	1104	1103	1102	16162	3509	69 51·8	48041
July	533	535	531	14·4	14·5	14·3	1105	1105	1103	16158	3505	69 52·2	48040
Aug.	531	532	525	13·7	13·6	13·2	1105	1105	1102	16155	3502	69 52·4	48039
Sept.	529	532	524	12·9	13·3	12·8	1107	1106	1109	16155	3497	69 52·5	48041
Oct.	521	527	509	12·1	12·6	11·5	1110	1110	1109	16148	3492	69 53·1	48040
Nov.	528	531	517	11·6	11·6	11·6	1109	1108	1111	16155	3491	69 52·6	48041
Dec.	524	533	508	10·3	10·8	9·2	1112	1108	1117	16153	3484	69 53·0	48043
Year	527	530	520	14·5	14·6	14·1	1107	1106	1107	16151	3505	69 52·6	48039

HARMONIC COMPONENT OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of a_n, b_n in the series $\Sigma\,(a_n\cos 15nt + b_n\sin 15nt)$, t being reckoned in hours from midnight G.M.T.

Longitude of Eskdalemuir Observatory, 3°12′W.

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	North component								West component								Vertical component							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
												ALL DAYS												
Jan.	+1·4	+2·3	−2·8	+0·1	+1·2	−1·8	−0·2	+0·1	−9·8	−1·0	−0·2	+2·6	−0·6	−0·9	+1·3	+1·4	−0·3	−7·8	−1·4	−1·3	+0·3	−0·1	−0·4	−0·1
Feb.	+6·5	+2·8	−4·0	−1·7	+2·7	−1·7	+0·9	+1·9	−9·5	−2·9	+0·1	+6·7	−0·2	−3·4	+0·9	+1·5	+0·1	−7·2	−3·0	−1·7	+0·3	+0·2	−1·2	−2·1
Mar.	+11·5	+0·7	−6·5	−1·1	+3·9	−3·4	+0·6	+1·3	−11·8	−6·3	+3·5	+9·7	−0·3	−5·2	+1·8	+1·0	−2·7	−12·1	−8·9	−1·0	+1·1	+1·4	−0·6	−1·5
Apr.	+14·7	−2·9	−8·7	−1·1	+3·4	−1·5	+0·3	+0·6	−7·7	−10·9	+5·0	+10·5	−2·8	−3·0	+0·6	+2·8	+0·4	−9·0	−6·8	−0·7	+1·9	−0·6	−0·4	−0·3
May	+14·4	−7·7	−9·2	+0·9	+1·3	+0·1	+0·6	+0·3	−8·8	−16·6	+4·7	+9·9	−1·9	−2·1	+1·4	+0·6	+5·2	−7·7	−7·5	−1·6	+1·4	+0·6	−0·5	−0·2
June	+13·8	−5·9	−9·7	−1·2	+0·9	−0·7	0·0	+1·1	−3·3	−18·8	+3·9	+9·3	−2·3	−1·8	+0·3	+0·2	+5·0	−6·2	−5·0	−1·3	+1·1	+0·2	−0·4	0·0
July	+17·5	−7·3	−11·2	+1·3	+1·8	−2·0	−0·2	+0·3	−6·2	−19·8	+4·0	+8·4	−2·7	−2·2	+0·2	+1·2	+3·5	−7·7	−4·9	−1·7	+0·7	+0·4	−0·5	−1·0
Aug.	+17·1	−7·0	−7·5	+1·9	+1·9	−2·5	+1·0	+1·0	−8·2	−16·8	+6·9	+7·9	−3·6	−3·8	+0·4	+0·6	+3·0	−6·7	−6·5	−1·9	+3·5	−0·1	+0·1	0·0
Sept.	+15·1	−2·5	−7·4	+1·6	+2·5	−3·1	−0·2	+0·9	−9·3	−11·6	+3·6	+10·0	−3·7	−3·7	+0·7	+1·5	+0·7	−6·6	−6·2	−1·6	+2·0	+0·3	−0·3	−0·2
Oct.	+12·7	+0·9	−8·9	−0·2	+2·2	−3·4	−1·3	+1·3	−13·7	−8·1	+1·5	+9·0	−3·8	−4·0	+2·3	+1·4	−2·2	−8·3	−6·3	−0·7	+0·7	−0·8	−1·9	+0·2
Nov.	+6·4	+1·3	−4·1	−0·5	+1·9	−2·7	−0·7	+0·6	−8·0	−2·9	+0·1	+4·2	−1·0	−1·9	+1·6	+1·3	0·0	−6·3	−1·3	+0·1	+0·1	−0·1	−0·3	0·0
Dec.	+2·1	+1·7	−4·7	−1·9	+0·3	−1·5	+0·1	−0·7	−11·0	−1·8	−1·4	+2·3	−0·5	−0·5	+1·0	+1·0	+1·8	−9·9	+0·4	0·0	+0·2	−0·9	−0·8	−0·3
Year	+11·1	−2·0	−7·1	−0·1	+2·0	−2·0	+0·1	+0·7	−8·9	−9·8	+2·7	+7·5	−1·9	−2·7	+1·1	+1·2	+1·2	−7·9	−4·8	−1·1	+1·1	+0·1	−0·6	−0·5
Winter	+4·1	+2·0	−3·9	−1·0	+1·5	−1·9	+0·1	+0·4	−9·5	−2·2	−0·3	+3·9	−0·6	−1·7	+1·2	+1·3	+0·4	−7·8	−1·3	−0·7	+0·2	−0·2	−0·7	−0·7
Equinox	+13·5	−1·0	−7·9	−0·2	+3·0	−2·9	−0·1	+1·0	−10·6	−9·2	+3·4	+9·8	−2·6	−4·0	+1·3	+1·7	−0·9	−9·0	−7·0	−1·0	+1·4	+0·1	−0·8	−0·5
Summer	+15·7	−7·0	−9·4	+0·8	+1·5	−1·3	+0·3	+0·7	−6·6	−18·0	+4·9	+8·9	−2·6	−2·4	+0·6	+0·6	+4·2	−7·1	−6·0	−1·6	+1·7	+0·3	−0·3	−0·3
												QUIET DAYS												
Year	+10·6	−2·0	−6·9	+0·3	+2·1	−1·6	−0·1	+0·9	−4·3	−9·9	+3·2	+7·0	−2·9	−2·9	+0·8	+1·3	+3·7	−1·4	−3·2	−0·2	+1·6	0·0	−0·7	−0·2
Winter	+3·4	+0·7	−3·9	−1·0	+1·5	−1·0	−0·2	+0·9	−5·1	−3·3	+0·8	+4·2	−1·9	−1·2	+0·9	+1·4	+1·6	−1·9	−0·5	+0·4	+0·6	−0·2	−0·5	−0·4
Equinox	+14·0	−1·1	−7·8	+0·6	+3·1	−2·4	0·0	+1·1	−3·7	−10·5	+3·6	+8·5	−3·9	−4·4	+1·3	+1·6	+3·0	−1·3	−3·5	−0·7	+2·4	+0·1	−1·1	−0·2
Summer	+14·5	−5·4	−8·9	+1·2	+1·6	−1·4	0·0	+0·7	−3·9	−15·9	+5·1	+8·2	−2·9	−3·0	+0·2	+0·8	+6·5	−1·0	−5·6	−0·3	+1·7	0·0	−0·6	−0·1
												DISTURBED DAYS												
Year	+13·7	−3·1	−8·1	+1·7	+1·8	−3·7	+1·1	+0·5	−16·8	−8·5	+3·7	+8·4	+0·3	−4·7	+1·5	+0·7	−5·4	−24·1	−7·4	−2·9	+2·1	+0·3	+0·4	−0·5
Winter	+7·6	+3·3	−4·5	+1·1	+1·0	−4·5	−0·1	0·0	−17·7	+3·3	+2·3	+3·9	+4·0	−5·1	+2·2	+1·4	−3·6	−21·7	−2·8	−1·9	−0·1	+1·0	+0·3	−1·0
Equinox	+14·7	−2·1	−9·0	+1·9	+2·7	−5·6	+1·7	+0·3	−22·2	−8·5	+4·3	+11·1	−1·1	−6·4	+0·8	+0·5	−12·6	−29·7	−14·9	−2·0	+2·5	−0·7	+0·1	−1·3
Summer	+18·8	−10·4	−10·8	+2·2	+1·6	−1·0	+1·6	+1·2	−10·5	−20·1	+4·6	+10·1	−2·0	−2·6	+1·7	+0·2	+0·1	−20·9	−4·4	−5·0	+3·7	+0·7	+0·7	+0·8

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC FORCE

Values of c_n, α_n in the series $\Sigma c_n\sin(15nt + \alpha_n)$, t being mean local time reckoned in hours from midnight

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	North component								West component								Vertical component							
	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°	γ	°
												ALL DAYS												
Jan.	2·7	35	2·8	278	2·2	156	0·2	306	9·8	267	2·6	3	1·1	225	1·9	55	7·8	185	1·9	233	0·3	114	0·4	262
Feb.	7·1	70	4·3	254	3·2	131	2·1	39	10·0	257	6·7	7	3·4	193	1·8	45	7·2	182	3·5	247	0·4	66	2·4	222
Mar.	11·5	90	6·6	266	5·1	141	1·5	37	13·4	245	10·3	26	5·2	193	2·0	74	12·4	196	8·9	270	1·7	47	1·6	216
Apr.	15·0	104	8·8	269	3·7	124	0·7	38	13·3	218	11·6	32	4·1	233	2·9	25	9·0	181	6·8	270	2·0	118	0·5	241
May	16·4	121	9·3	282	1·3	97	0·7	73	18·8	211	11·0	32	2·8	232	1·5	81	9·3	149	7·7	265	1·5	75	0·6	266
June	15·0	116	9·8	269	1·1	135	1·1	11	19·0	193	10·1	29	2·9	241	0·4	78	8·0	144	5·2	261	1·2	91	0·4	288
July	19·0	116	11·3	283	2·7	148	0·3	341	20·7	201	9·3	32	3·5	240	1·2	25	8·4	159	5·2	257	0·9	69	1·1	222
Aug.	18·5	115	7·8	287	3·1	153	1·4	59	18·7	209	10·5	48	5·2	233	0·7	44	7·3	159	6·7	260	3·5	102	0·1	107
Sept.	15·3	102	7·6	289	4·0	150	0·9	359	14·9	222	10·6	26	5·2	234	1·7	38	6·7	177	6·4	262	2·0	91	0·4	248
Oct.	12·7	89	8·9	275	4·1	156	1·9	329	15·8	242	9·2	16	5·5	233	2·7	72	8·5	198	6·3	270	1·1	148	1·9	289
Nov.	6·5	82	4·1	269	3·3	154	0·9	327	8·5	253	4·2	8	2·2	216	2·1	63	6·3	183	1·3	279	0·1	154	0·3	275
Dec.	2·7	55	5·1	254	1·5	179	0·7	187	11·0	264	2·7	335	0·7	233	1·4	57	10·1	173	0·4	90	0·9	175	0·9	263
Year	11·3	103	7·1	275	2·8	144	0·7	23	13·2	226	8·0	26	3·3	225	1·6	54	8·0	174	4·9	263	1·1	97	0·8	247
Winter	4·6	67	4·1	262	2·4	151	0·4	20	9·8	260	4·0	1	1·8	209	1·8	55	7·8	180	1·5	248	0·3	140	0·9	238
Equinox	13·5	97	7·9	275	4·2	143	1·0	5	14·0	232	10·4	26	4·8	223	2·1	52	9·1	189	7·1	268	1·4	97	0·9	254
Summer	17·2	117	9·5	281	1·9	140	0·8	39	19·2	203	10·1	35	3·5	237	0·9	55	8·2	153	6·2	261	1·7	90	0·4	245
												QUIET DAYS												
Year	10·8	104	6·9	279	2·6	137	0·9	7	10·8	206	7·7	31	4·1	235	1·5	46	3·9	114	3·2	273	1·6	101	0·8	266
Winter	3·5	82	4·0	262	1·8	135	0·9	1	6·1	240	4·3	17	2·3	246	1·7	47	2·5	143	0·7	314	0·6	115	0·7	246
Equinox	14·0	98	7·9	281	3·9	138	1·1	11	11·2	203	9·2	29	5·9	231	2·1	52	3·3	116	3·5	266	2·4	98	1·1	272
Summer	15·5	114	9·0	284	2·1	141	0·7	11	16·4	197	9·7	38	4·2	234	0·8	29	6·6	102	5·6	274	1·7	98	0·6	268
												DISTURBED DAYS												
Year	14·1	106	8·3	288	4·1	164	1·2	79	18·8	247	9·2	31	4·7	186	1·7	78	24·7	196	7·9	255	2·1	90	0·6	154
Winter	8·3	70	4·7	290	4·6	177	0·1	261	18·0	284	4·5	37	6·5	152	2·6	70	22·0	193	3·4	243	1·0	6	1·0	176
Equinox	14·8	101	9·2	288	6·2	164	1·8	93	23·8	252	11·9	28	6·5	199	0·9	68	32·3	206	15·1	269	2·6	114	1·3	188
Summer	21·5	122	11·1	288	1·9	133	2·0	66	22·6	211	11·0	31	3·3	227	1·7	98	20·9	183	6·7	228	3·8	89	1·1	53

KEW

KEW OBSERVATORY

Latitude	51°28′N.
Longitude	0°19′W.
G.M.T. of Local Mean Noon	12h. 1m.

Heights of instruments	above M.S.L.	above ground
	m.	m.
Barometer	10·4	..
Thermometer bulbs	..	3·0
Rain-gauge site	5·5	..
Tilting-siphon rain recorder rim	..	0·53
Sunshine recorder	..	13·3
Pressure-tube anemograph	28	23

INTRODUCTION

Full details of the site, instruments, procedure and tabulation are given in the *Observatories' Year Book* for 1938. Changes and additions only are mentioned here.

METEOROLOGY

NOTES ON THE INSTRUMENTS

Pressure.- The photographic barograph is mounted in the galvanometer room of the underground Seismograph House. It was transferred there on May 15, 1939 from the position in the north room of the basement of the Main Observatory Building which it had occupied since the inception of the record in 1862.

Temperature.- As from January 1943, Kew adopted the practice followed by the other Observatories for the tabulation of hourly readings of temperature from the curves of the photo-thermograph i.e. by adjusting the glass scale, so that the readings at the control hours on the trace are made to show general agreement with the corresponding eye readings of the standard control thermometers, and then reading off the temperature equivalent from the curves at the requisite times. This supersedes method (a) set out on page 3 of the General Introduction to the *Observatories' Year Book* for 1938.

Rainfall.- On and after October 1, 1944 the hourly readings are from a Meteorological Office tilting-siphon recorder, M.O.80, instead of from the old Beckley self-registering rain gauge No.1 which had been continuously in operation at Kew Observatory since 1871. The new instrument, whose funnel also has a collecting area of approximately 100 sq. in., is set up 8·5 m. S.S.W. of the standard check gauge with the rim at exactly the same height above ground level as was the old Beckley gauge, i.e. 0·53 m. From January 1, 1945 onwards the hourly readings are adjusted to give totals in agreement with the check gauge read daily at 9h. and 21h. Prior to August 1, 1944 the check gauge was read at 7h. and 18h. and from August 1, to December 31, 1944 at 6h. and 18h.

A special instrument, known as the rainfall chronograph, which in effect is a sensitive drop counting gauge, is used to help in determining the duration of rainfall of 0·1 mm./hr. or more. This gauge stands on the lawn about 6·5 m. W.N.W. of the tilting-siphon recorder. The Jardi rate-of-rainfall recorder has proved to be unreliable at rates below 6 mm./hr. and such values are omitted from Table 169.

Solar radiation.- The tabulations of the radiation received on a surface perpendicular to the solar beam (Tables 173 and 175) were made on the assumption that the thermopile of the Gorczynski pyrheliograph had maintained its sensitivity. Subsequent investigation indicated that a progressive decrease in sensitivity had occurred and that all tabulations from 1938 onwards needed correction. The values printed for January, February and March 1945 should be multiplied by the factor 1·20*. After repair in April 1945 the resistance of the thermopile circuit was adjusted to restore F to its original value of 1·00.

Minimum temperature on the grass.- From January 1, 1945 onwards, the thermometer was set at 21h. and read at 9h. and the printed values refer to the period 21h. on the previous day to 9h. on the day of entry.

IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1945

During 1945 thermometer No. 788 was used as the control dry-bulb thermometer and No. 738 as the control wet-bulb thermometer; 1884 and 1887 were used as the measuring glasses for the control rain-gauge.

Thermometer corrections 1945

	No. 788 N.P.L. 1933		No. 738 N.P.L. 1938		M.O. 5 N.P.L. 1913		M.O. 10 N.P.L. 1913		M.O. 18011 N.P.L. 1929	
	°F.		°F.		°A.		°A.		°F.	
Certified	2	+0·1	2	+0·2	250	+0·1	250	+0·3	2	0·0
	12	+0·1	12	+0·1	273	0·0	273	+0·1	22	0·0
	32	0·0	32	0·0	280	0·0	280	+0·2	32	0·0
	52	−0·1	52	−0·1	290	0·0	290	+0·1	52	0·0
	72	0·0	72	−0·1	300	0·0	300	0·0	72	0·0
	92	0·0	92	−0·2	310	0·0	316	+0·1	..	..
Applied		0·0		0·0		0·0		+0·1		0·0

NOTES ON THE METEOROLOGICAL SUMMARIES

Despite the intense cold of January with a mean temperature of only 274·1°A. (34·1°F.), 5·0°F. below the average, the mean temperature for the year 1945, 284·0°A. (51·8°F.), was well above the average of 282·8°A. (49·6°F.) for the period 1871-1915. This was due to three exceptionally mild months; February with a mean temperature 5·6°F. above average, only equalled twice, i.e. in 1872 and 1926, since the commencement of records, March, 4·8°F. above average and October, the warmest since 1921, 4·1°F. above average.

There were 3 days, 1 each in May, June and August, on which the maximum temperature in the north-wall screen exceeded 300°A. (80·6°F.). The highest reading was 301·7°A. (83·7°F.) at 13h. 5m. on July 15. There were 4 "ice days", i.e. days with a maximum temperature in the screen of 273°A. (32·0°F.) or less, all in January with a continuous period of 112 hours when temperature remained below freezing. The lowest temperature in the north-wall screen was 265·9°A. (19·2°F.) registered at 3h. 10m. on January 26, whilst the lowest reading of the grass minimum thermometer was 260·1°A. (8·8°F.) on January 29.

The rainfall for the year, 504 mm., was 17 per cent below the average for the standard period 1881-1915. November, with only 7 mm., was the driest since 1871 whilst March with only 55 per cent of the average was also a dry month. In only 3 months of 1945 did the rainfall

* STAGG, J.M.: Solar radiation at Kew Observatory. *Geophys. Mem., London*, 11, No. 86, 1950.

exceed the normal. These were May, July, and December with 140, 124 and 117 per cent respectively of the average. The heaviest fall in one day was 25 mm. on July 14.

The sunshine for the year, 1403 hours, was 66 hours less than the normal for the period 1906-35. The sunniest month was May, with 202 hours, whilst September had only 64 hours, the lowest total since records began in 1881.

The highest wind speed recorded in a gust was 28 m./sec. (62 m.p.h.) on October 23. The highest on record is 33 m./sec. (73 m.p.h.) on November 23, 1938.

Diurnal variation of pressure and temperature; harmonic analysis.– Notes on the tables will be found in the *Observatories' Year Book, 1938*.

TABLE A – DIURNAL VARIATION OF BAROMETRIC PRESSURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19′ W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926
	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°	mb.	mb.	°	°
January	0.04	0.02	346	315	0.30	0.31	179	151	0.16	0.17	352	346	0.12	0.07	216	202
February	0.22	0.05	148	73	0.42	0.36	142	146	0.06	0.12	5	340	0.05	0.03	48	108
March	0.38	0.11	354	38	0.43	0.40	145	149	0.05	0.07	356	332	0.03	0.04	12	25
April	0.16	0.28	307	31	0.45	0.40	152	151	0.04	0.03	148	185	0.04	0.04	337	353
May	0.31	0.32	19	27	0.03	0.35	148	148	0.10	0.09	157	161	0.02	0.02	344	319
June	0.24	0.30	13	17	0.26	0.32	139	143	0.11	0.09	152	160	0.03	0.01	341	260
July	0.17	0.26	0	16	0.31	0.31	134	140	0.11	0.10	142	153	0.02	0.01	31	281
August	0.25	0.21	28	20	0.35	0.34	138	144	0.10	0.06	165	155	0.04	0.04	319	309
September	0.04	0.12	245	6	0.44	0.40	141	152	0.05	0.01	8	350	0.05	0.04	335	332
October	0.02	0.06	33	76	0.33	0.38	164	160	0.15	0.09	336	359	0.01	0.01	343	22
November	0.11	0.03	80	124	0.33	0.34	159	160	0.11	0.13	360	358	0.02	0.03	242	183
December	0.42	0.08	173	137	0.20	0.31	147	152	0.14	0.15	335	353	0.08	0.07	174	205
Arithmetic mean	0.20	0.15			0.32	0.35			0.10	0.09			0.04	0.03		
Year	0.08	0.14	19	29	0.34	0.35	149	150	0.03	0.03	14	359	0.02	0.01	330	280
Winter	0.15	0.03	154	111	0.30	0.33	156	152	0.12	0.14	350	350	0.04	0.05	193	208
Equinox	0.15	0.14	350	32	0.41	0.39	150	153	0.05	0.04	351	345	0.03	0.03	344	359
Summer	0.24	0.27	17	20	0.26	0.33	140	144	0.10	0.08	154	157	0.02	0.02	342	305

TABLE B – DIURNAL VARIATION OF TEMPERATURE FOURIER COEFFICIENTS
KEW OBSERVATORY, LONGITUDE 0°19′ W.

Values of c_n, α_n in the series $\Sigma c_n \sin(15nt + \alpha_n)$, t being local mean time reckoned in hours from midnight

	c_1		α_1		c_2		α_2		c_3		α_3		c_4		α_4	
	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926	1945	1871-1926
	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°	°A.	°A.	°	°
January	0.80	0.99	225	221	0.34	0.43	35	35	0.15	0.17	201	208	0.09	0.01	336	3
February	1.55	1.53	220	221	0.51	0.57	19	34	0.15	0.12	203	211	0.04	0.06	186	169
March	3.05	2.45	218	222	0.61	0.63	34	40	0.05	0.07	331	334	0.12	0.11	191	197
April	3.59	3.21	226	226	0.35	0.48	60	51	0.30	0.22	10	24	0.06	0.07	238	218
May	3.36	3.72	228	227	0.21	0.15	46	74	0.30	0.31	44	35	0.05	0.04	199	20
June	2.77	3.72	227	226	0.24	0.02	239	84	0.23	0.26	35	35	0.13	0.10	18	33
July	3.27	3.68	224	225	0.10	0.06	19	50	0.22	0.29	44	31	0.08	0.07	23	28
August	3.11	3.54	221	226	0.24	0.34	32	52	0.29	0.30	20	28	0.05	0.03	163	218
September	1.94	3.22	225	228	0.45	0.71	46	49	0.04	0.14	13	24	0.10	0.16	212	213
October	2.23	2.32	229	229	0.76	0.76	40	50	0.02	0.10	155	248	0.11	0.12	171	200
November	1.28	1.39	227	226	0.46	0.57	42	44	0.11	0.18	221	232	0.03	0.02	126	141
December	0.80	0.90	201	226	0.52	0.40	26	41	0.21	0.16	220	215	0.06	0.04	7	38
Arithmetic mean	2.31	2.56			0.40	0.43			0.17	0.19			0.08	0.07		
Year	2.31	2.56	224	226	0.35	0.42	36	45	0.06	0.08	25	17	0.01	0.02	183	195
Winter	1.09	1.20	220	223	0.45	0.49	30	39	0.16	0.15	212	217	0.02	0.01	351	121
Equinox	2.72	2.80	224	226	0.53	0.64	43	47	0.09	0.09	7	4	0.09	0.11	200	207
Summer	3.13	3.67	225	226	0.08	0.14	17	59	0.26	0.29	35	32	0.05	0.04	44	27

"Winter" comprises the four months January, February, November, December; "Equinox" the months March, April, September, October; and "Summer" May to August.

ATMOSPHERIC ELECTRICITY

No change took place during 1945 in the method and procedures for observing potential gradient, air-earth current and conductivity from those printed in the Introduction for 1938. Details of the change of position of the Kelvin electrograph in April 1940 and of the effects on the instrument of the erection of a fire escape in March 1941 are printed in the Introduction for the years in question.

In 1945 the mean value of the air-earth current for the year, allowing equal weight for each month, was 105×10^{-18} amp. cm.$^{-2}$. The mean value of the conductivity for the year was 40×10^{-18} ohm.$^{-1}$ cm.$^{-1}$.

The mean factor for the year for the Kelvin electrograph was 4·33 giving an equivalent height for the collector of 23·1 cm. In 1945 there were 164, 165 and 36 days of electrical character 0, 1, and 2 respectively. The extreme hourly values of potential gradient in Table 183 are 1420 v./m. at 3h. on December 31 and -1365 v./m. at 3h. on December 29.

During the following months there were not 10 "quiet" calendar days.

1945	Calendar days	Other spells	Total
January	6	0	6
December	8	2	10

The *Observatories' Year Book, 1938* should be consulted for an explanation of the figures in the foregoing paragraphs.

ATMOSPHERIC POLLUTION

During 1945 the highest estimate of pollution was 1·7 mg./m.^{3}, this value occurring on November 22 at 01h.

There were 18 days on which the pollution reach 1·0 mg./m.^{3}. The number of hours credited with 1·0 mg./m.^{3} was 58 of which 18 were recorded during November and 21 during December.

SEISMOLOGY

The Seismological Diary and Table of Microseisms, which were printed in the *Observatories' Year Book* from 1922 to 1939 are now omitted. The distribution of the *Kew Monthly Bulletin* ceased in May 1940* but such seismological data as are available for 1945 are published in the *International Seismological Summary*.

No change took place in instruments or procedures from those printed in the Introductions for 1938 and 1939 except that the two modified Wood-Anderson seismographs, which were put out of commission as an economy measure in May 1942, have not been reinstated.

The Galitzin seismographs were not standardised during 1945.

The total number of shocks measured during the year was 281. The phases of 78 of these were sufficiently well defined to allow an estimate of the epicentral distance to be computed. No British earthquakes were recorded during 1945.

* It was resumed in 1947.

PRESSURE AT STATION LEVEL

Maximum, minimum and daily mean values in millibars for each day 0h. to 24h., G.M.T.
The initial 9 or 10 of the values is omitted, i.e. 1005·61 is printed 05·61

161 KEW OBSERVATORY: h_b(height of barometer cistern above M.S.L.) = 10·4 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	*37·9*	33·7	*36·6*	07·2	96·6	03·0	34·8	25·5	28·6	08·7	00·7	05·4	17·6	16·0	17·0	12·7	10·1	11·4
2	36·8	28·0	33·6	06·9	92·2	00·3	41·4	34·8	38·5	07·9	*98·3*	*04·6*	17·2	10·0	13·0	15·5	12·2	13·4
3	28·0	02·4	13·0	22·6	06·9	18·1	*42·1*	38·3	*40·5*	15·4	07·1	10·5	10·1	03·0	06·9	15·4	05·2	10·9
4	10·1	03·0	05·1	17·1	08·8	13·6	38·3	30·2	33·6	16·9	15·1	16·1	05·7	02·9	04·7	15·0	*05·1*	11·2
5	18·6	10·1	15·2	19·5	12·4	14·9	32·3	28·4	30·4	23·9	12·2	16·8	05·0	01·1	02·8	15·1	11·2	13·8
6	18·9	17·0	18·2	20·7	10·9	17·0	30·2	28·6	29·3	31·9	23·9	27·8	14·3	02·4	08·4	11·2	08·8	09·8
7	17·0	08·5	12·2	15·5	05·0	09·3	33·3	29·9	31·4	36·1	31·9	*34·9*	15·7	13·1	14·4	11·9	06·7	08·3
8	08·5	02·8	04·6	15·7	98·7	06·5	40·0	32·1	35·6	*36·3*	32·2	34·6	14·7	08·7	11·4	21·4	11·8	16·1
9	05·7	00·1	02·5	12·5	01·2	08·1	41·9	39·3	40·4	33·7	27·7	31·4	15·2	07·6	11·8	24·8	21·4	23·7
10	10·3	05·6	08·1	02·4	95·7	00·2	39·8	35·8	37·3	27·8	12·2	19·7	17·0	13·6	15·3	24·3	18·9	21·4
11	16·1	05·9	13·4	02·9	*88·8*	*97·7*	38·0	36·5	37·1	12·2	04·6	08·1	17·0	13·3	15·1	21·5	16·2	19·2
12	24·3	14·4	18·2	05·3	00·4	02·7	36·6	32·2	34·5	13·1	06·2	09·2	17·1	13·2	15·5	22·8	13·5	15·8
13	29·2	24·2	27·1	17·6	04·4	08·6	32·7	29·4	31·0	16·9	13·1	14·4	17·1	08·2	11·3	27·1	22·8	25·6
14	30·1	27·4	28·7	25·4	17·6	22·7	29·7	25·3	27·5	22·0	16·6	18·8	18·2	16·1	17·2	24·9	21·6	22·6
15	27·4	21·7	24·8	25·5	21·8	24·0	26·0	21·2	23·5	21·6	24·0	22·5	*19·7*	17·0	*18·6*	22·0	14·3	17·5
16	21·7	08·1	15·3	25·3	20·7	22·7	25·6	20·7	22·5	22·2	18·4	20·0	19·4	14·4	16·9	25·3	15·6	20·0
17	09·2	03·5	07·5	28·9	25·1	26·4	29·4	25·6	27·6	24·2	20·3	21·7	15·6	13·5	14·3	26·6	24·4	*25·6*
18	03·5	71·1	*86·3*	34·0	28·8	31·3	29·3	24·0	27·0	29·4	24·2	27·1	16·1	11·7	14·0	25·7	22·4	24·2
19	03·6	*71·0*	93·5	34·2	31·4	33·0	24·0	14·4	19·5	30·2	25·9	28·4	11·9	05·1	08·2	22·5	10·6	17·2
20	05·3	97·4	00·4	39·2	30·8	34·3	27·0	16·9	24·0	25·9	12·0	19·3	05·2	00·4	03·0	12·4	06·3	08·8
21	13·4	04·7	09·5	*39·7*	36·6	*38·2*	27·6	25·5	26·5	15·6	11·0	13·5	04·6	01·4	03·0	15·6	10·0	12·2
22	15·2	09·3	13·5	36·6	31·6	34·4	26·8	23·8	25·5	19·2	15·1	17·2	03·2	01·0	02·3	18·9	15·6	17·8
23	09·3	00·2	03·4	34·0	28·8	30·5	23·2	13·9	18·5	21·0	19·2	20·3	13·7	02·6	07·6	20·8	17·0	18·9
24	09·1	05·8	07·7	36·0	28·3	32·8	13·9	06·9	10·3	20·9	15·6	18·5	17·0	13·7	15·8	25·4	20·5	21·8
25	11·0	09·0	10·2	28·6	23·7	25·1	11·5	*06·5*	*09·0*	15·6	09·2	11·6	15·4	06·6	10·5	*27·1*	22·3	24·9
26	12·6	08·5	11·0	33·3	23·6	28·1	18·8	11·2	14·5	09·6	05·6	07·3	06·6	99·4	02·6	22·3	16·7	19·0
27	12·7	07·9	10·1	36·0	33·3	34·6	22·3	18·8	20·3	07·6	04·4	05·8	03·2	*98·8*	*01·0*	16·7	11·8	13·9
28	30·9	12·7	21·3	35·9	30·0	33·5	19·4	14·5	16·4	08·1	03·7	06·7	04·0	01·6	02·9	11·8	05·4	08·2
29	31·3	21·5	28·4				14·6	10·0	12·4	13·9	03·4	08·8	07·6	01·2	03·9	09·3	05·5	*07·9*
30	21·5	05·3	09·4				17·8	11·2	14·8	17·6	13·9	15·9	13·5	07·2	10·1	11·7	06·1	09·7
31	07·9	99·3	05·1				17·8	08·7	14·6				13·9	10·5	12·3			
Mean	17·33	07·75	12·70	23·52	15·50	19·69	28·60	23·23	25·89	20·18	14·26	17·24	12·63	07·59	10·05	19·26	13·67	16·36

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	millibars																	
1	06·4	*02·4*	*04·2*	23·2	20·0	21·5	18·4	16·8	17·8	37·3	34·7	36·1	14·4	10·0	11·9	12·6	05·2	08·9
2	15·2	06·4	10·6	24·2	22·3	23·2	20·6	17·5	19·2	*37·9*	36·2	*36·9*	13·6	*09·5*	*11·4*	10·6	04·2	06·8
3	16·8	15·1	15·9	*24·7*	21·4	*23·2*	20·5	17·9	19·4	36·4	31·7	34·5	15·3	13·2	14·2	21·1	10·2	14·0
4	16·4	12·2	13·9	22·0	16·2	18·8	19·7	18·3	18·8	31·8	25·0	27·5	15·2	13·4	14·4	22·0	05·5	15·7
5	12·2	09·6	10·9	16·2	07·6	11·7	23·6	19·5	21·2	32·4	25·9	30·0	23·7	15·1	18·7	18·8	05·7	13·2
6	10·8	07·4	09·3	11·5	08·7	10·1	25·4	23·3	24·2	32·3	27·8	29·8	*29·0*	23·7	*26·7*	25·0	18·8	22·7
7	18·1	10·8	13·5	11·4	10·5	10·9	25·0	21·6	23·5	30·1	28·4	29·3	28·9	23·1	26·7	28·9	24·5	26·3
8	19·5	16·2	17·9	11·6	09·6	10·3	21·6	16·4	18·4	28·5	24·5	26·5	23·1	12·6	16·1	*32·7*	28·9	*30·7*
9	16·3	07·7	10·2	11·4	06·3	10·0	16·9	15·8	16·5	24·5	11·7	18·3	15·0	12·5	13·4	30·1	26·5	28·3
10	08·1	06·2	06·9	09·4	05·1	06·6	19·1	16·3	17·2	16·8	10·0	12·4	16·1	14·7	15·4	27·2	25·5	26·2
11	15·7	07·9	11·4	12·2	09·3	11·1	23·7	18·9	21·2	26·8	16·8	21·7	15·8	12·6	14·1	30·4	26·4	27·5
12	18·9	15·7	17·7	13·9	12·0	12·7	23·8	13·7	20·0	28·8	26·7	27·6	13·6	12·0	12·6	30·8	23·6	28·6
13	18·9	12·3	15·8	13·9	10·5	12·3	13·8	07·8	10·4	30·6	28·7	29·6	16·0	12·5	14·0	23·6	16·6	19·1
14	15·1	11·6	13·3	10·6	09·2	09·7	09·7	04·8	07·5	29·8	27·8	28·9	17·8	15·5	16·7	24·4	20·4	22·6
15	15·6	03·1	06·6	13·7	08·1	09·9	13·7	07·9	12·0	29·1	26·9	28·0	21·5	17·5	19·2	20·4	10·8	15·7
16	24·9	05·4	16·7	14·8	11·1	13·3	15·8	11·0	13·3	27·8	25·3	26·5	20·9	17·6	19·3	10·8	99·5	04·4
17	*25·5*	20·6	23·5	11·1	07·4	09·2	15·8	06·4	12·0	25·4	22·3	23·8	18·7	16·1	17·5	99·5	81·9	87·5
18	20·6	07·1	14·4	08·4	06·5	07·4	06·8	01·6	*04·8*	22·7	19·5	21·0	20·1	17·8	18·8	81·9	69·8	*76·5*
19	10·4	06·6	09·0	07·2	05·6	06·2	12·5	*99·3*	07·1	20·2	17·4	13·9	17·8	15·6	16·5	91·2	*69·0*	77·5
20	18·5	09·4	13·9	06·9	04·9	06·1	18·4	12·5	14·5	17·7	11·8	14·7	17·6	16·4	16·9	01·9	91·2	98·7
21	18·6	14·1	17·0	04·9	98·4	99·9	19·0	13·0	17·2	11·8	03·7	07·1	19·9	16·6	18·1	00·3	94·3	96·9
22	24·3	13·5	19·2	03·8	*96·7*	*98·4*	13·0	07·0	09·7	09·3	04·3	07·5	20·8	19·2	20·0	96·2	83·7	90·6
23	24·7	22·4	*23·7*	13·2	03·8	10·5	12·6	05·3	09·0	08·0	00·0	03·7	19·2	12·7	15·0	90·1	83·6	87·4
24	23·4	20·0	21·7	12·2	08·7	09·9	16·8	04·3	10·1	00·5	89·7	94·2	18·6	12·4	14·9	85·3	78·7	80·8
25	20·4	15·6	18·1	18·4	11·0	13·9	24·4	16·8	20·7	97·1	82·6	91·4	24·1	18·6	21·9	02·1	85·3	96·5
26	16·1	08·1	11·4	21·5	18·4	19·9	25·5	22·7	24·3	93·3	*80·8*	*85·7*	24·2	19·4	21·6	08·9	02·1	06·2
27	16·4	07·7	11·8	19·7	14·5	16·6	23·2	20·1	21·7	01·3	93·3	98·7	26·4	23·6	25·0	10·8	02·2	06·1
28	22·2	16·2	18·7	14·6	12·4	13·5	25·0	19·8	21·4	95·9	89·4	91·1	23·6	19·5	21·1	06·1	88·4	97·9
29	23·7	22·1	22·9	13·3	09·6	10·9	31·8	25·0	28·8	06·9	90·9	98·0	19·5	15·6	17·0	13·2	95·7	04·2
30	22·1	20·6	21·4	13·6	10·3	11·6	*34·8*	31·7	*33·4*	17·0	06·9	12·6	15·7	12·6	14·5	21·2	13·2	17·6
31	21·5	18·5	19·8	18·2	13·3	16·4				16·9	14·3	15·7				22·6	20·9	21·8
Mean	17·98	12·02	14·88	13·93	09·98	11·80	19·70	14·43	17·18	20·16	14·03	17·02	19·54	15·72	17·45	12·93	03·62	08·19
									Annual	18·76	12·61	15·65						

PRESSURE AT STATION LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

162 KEW OBSERVATORY: h_b = 10·4 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	13·16	12·95	13·07	13·09	12·95	12·85	12·72	12·87	13·17	*13·31*	13·27	13·13	12·76	12·25	12·09	12·25	12·30	12·38	12·52	12·49	12·50	12·50	12·44	12·30	*12·05*	12·70
Feb.	19·57	19·42	19·14	18·89	*18·76*	18·80	18·90	19·18	19·53	19·68	19·75	19·95	19·88	19·73	19·53	19·49	19·55	19·64	20·05	20·23	20·42	20·56	*20·70*	20·65	20·67	19·69
Mar.	26·42	26·36	26·25	26·04	25·98	25·96	26·16	26·36	26·52	*26·67*	26·60	26·46	26·20	25·85	25·45	25·19	*25·01*	25·02	25·15	25·33	25·51	25·65	25·76	25·77	25·73	25·89
Apr.	17·24	16·99	16·81	16·68	*16·64*	16·77	17·09	17·38	17·57	*17·78*	17·77	17·67	17·53	17·37	17·12	16·98	16·84	16·77	16·89	17·18	17·50	17·60	17·63	17·58	17·54	17·24
May	10·47	10·33	10·15	10·11	10·08	10·20	10·32	10·45	*10·50*	10·47	10·27	10·23	10·05	09·97	09·76	09·58	09·46	09·45	*09·41*	09·63	09·89	10·17	10·23	10·30	10·25	10·05
June	16·68	16·57	16·50	16·32	16·30	16·39	16·54	*16·72*	16·71	16·70	16·53	16·55	16·43	16·33	16·22	16·05	15·90	*15·81*	15·83	15·95	16·16	16·45	16·60	16·60	16·53	16·36
July	14·94	14·85	14·63	*14·45*	14·47	14·68	14·75	15·00	15·07	15·18	15·15	15·02	15·08	15·02	14·84	14·72	14·53	14·50	14·56	14·66	14·87	15·20	15·36	*15·43*	15·40	14·88
Aug.	*12·22*	12·06	11·91	11·72	11·69	11·73	11·89	12·03	12·11	12·11	12·03	12·00	11·86	11·75	11·59	11·39	11·25	*11·13*	11·14	11·42	11·81	12·04	12·18	12·14	12·15	11·80
Sept.	17·18	17·04	16·87	16·72	16·50	*16·49*	16·74	16·96	17·31	17·56	17·62	17·59	17·47	17·29	17·08	16·94	16·85	16·88	17·06	17·33	17·56	17·66	17·69	*17·73*	17·67	17·18
Oct.	*17·53*	17·42	17·22	17·05	17·03	17·01	17·01	17·12	17·32	17·49	17·45	17·37	17·05	16·75	16·51	*16·35*	16·37	16·61	16·85	16·97	17·10	17·17	17·08	16·95	16·88	17·02
Nov.	17·71	17·57	17·49	17·37	17·22	17·19	17·24	17·37	17·66	17·76	*17·81*	17·68	17·43	17·20	*16·99*	17·00	17·03	17·23	17·37	17·54	17·66	17·74	17·73	17·69	17·65	17·45
Dec.	08·16	07·95	07·89	07·78	07·65	07·53	*07·49*	07·53	07·70	07·94	08·37	08·43	08·30	08·15	08·10	08·18	08·41	08·55	08·72	08·76	*08·78*	08·75	08·69	08·62	08·46	08·19
Annual	15·89	15·75	15·62	15·48	15·40	15·42	15·53	15·70	15·88	*16·01*	16·00	15·89	15·79	15·59	15·39	15·29	*15·24*	15·28	15·41	15·57	15·76	15·90	15·95	15·93	15·86	15·65

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

PRESSURE REDUCED TO MEAN SEA LEVEL

Monthly and annual means of hourly values in millibars at exact hours, G.M.T.

163 KEW OBSERVATORY: h_b = 10·4 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	millibars																									
Jan.	14·47	14·26	14·39	14·40	14·27	14·17	14·04	14·19	14·49	*14·63*	14·59	14·45	14·07	13·56	13·39	13·56	13·61	13·69	13·83	13·80	13·82	13·81	13·75	13·61	*13·36*	14·01
Feb.	20·87	20·71	20·43	20·18	*20·06*	20·10	20·20	20·48	20·82	20·97	21·04	21·24	21·17	21·02	20·81	20·77	20·84	20·93	21·33	21·51	21·71	21·85	*21·99*	21·95	21·97	20·98
Mar.	27·72	27·67	27·55	27·35	27·29	27·27	27·47	27·67	27·83	*27·97*	27·90	27·76	27·49	27·13	26·73	26·47	*26·29*	26·30	26·44	26·62	26·80	26·94	27·06	27·07	27·03	27·19
Apr.	18·52	18·28	18·10	17·97	*17·93*	18·06	18·38	18·65	18·84	*19·05*	19·04	18·93	18·79	18·63	18·37	18·23	18·10	18·03	18·12	18·45	18·77	18·87	18·91	18·86	18·82	18·51
May	11·74	11·60	11·42	11·38	11·35	11·47	11·59	11·71	*11·76*	11·72	11·52	11·48	11·29	11·21	11·00	10·82	10·70	10·69	*10·65*	10·88	11·15	11·43	11·49	11·56	11·51	11·30
June	17·94	17·86	17·76	17·57	17·57	17·66	17·76	*17·96*	17·95	17·95	17·75	17·75	17·64	17·54	17·44	17·34	17·14	*17·04*	17·04	17·14	17·44	17·75	17·86	17·86	17·76	17·61
July	16·19	16·11	15·88	*15·70*	15·73	15·93	16·01	16·25	16·31	16·42	16·38	16·25	16·31	16·25	16·07	15·94	15·76	15·73	15·79	15·89	16·11	16·44	16·63	*16·67*	16·65	16·12
Aug.	*13·47*	13·31	13·16	12·97	12·94	12·99	13·14	13·28	13·36	13·35	13·27	13·23	13·09	12·98	12·82	12·62	12·48	*12·36*	12·37	12·65	13·05	13·28	13·42	13·39	13·40	13·04
Sept.	18·44	18·30	18·13	17·98	17·76	*17·75*	18·00	18·22	18·57	18·82	18·88	18·84	18·72	18·54	18·33	18·19	18·10	18·13	18·31	18·59	18·82	18·92	18·95	*18·99*	18·93	18·44
Oct.	*18·81*	18·69	18·49	18·33	18·31	18·29	18·29	18·40	18·59	18·76	18·71	18·63	18·31	18·01	17·76	*17·60*	17·63	17·87	18·11	18·24	18·73	18·44	18·35	18·22	18·15	18·29
Nov.	19·00	18·86	18·78	18·66	18·51	18·45	18·53	18·66	18·95	19·05	*19·10*	18·96	18·71	18·48	*18·27*	18·28	18·85	18·51	18·65	18·83	18·95	19·03	19·02	18·98	18·93	18·74
Dec.	09·45	09·24	09·18	09·07	08·93	08·81	*08·78*	08·83	08·99	09·23	09·66	09·72	09·59	09·43	09·38	09·46	09·69	09·83	10·00	10·04	*10·06*	10·04	09·98	09·90	09·75	09·47
Annual	17·17	17·03	16·90	16·76	15·68	16·70	16·81	16·98	17·15	*17·28*	17·27	17·16	17·05	16·85	16·65	16·55	*16·50*	16·54	16·67	16·84	17·03	17·17	17·22	17·20	17·13	16·92

The initial 9 or 10 of the value is omitted, i.e. 1001·42 is printed 01·42.

The monthly and annual values of pressure reduced to mean sea level are computed from the corresponding monthly and annual means of pressure at station level and of temperature. See General Introduction to the Meteorological Tables, 1938.

TEMPERATURE

Monthly and annual means of readings in degrees Absolute at exact hours, G.M.T.

164 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
	degrees Absolute																									
Jan.	73·57	73·59	73·55	73·50	*73·38*	73·44	73·45	73·46	73·58	73·74	74·00	74·34	75·00	75·29	*75·51*	75·33	75·05	74·65	74·32	74·29	74·29	74·19	73·94	73·84	73·83	74·14
Feb.	79·75	79·63	79·59	79·53	79·50	79·47	79·55	*79·45*	79·47	79·78	80·57	81·24	81·84	82·35	82·67	*82·83*	82·50	81·99	81·45	81·05	80·71	80·43	80·16	79·93	79·70	80·64
Mar.	79·77	79·34	79·09	78·87	78·67	78·58	*78·55*	78·77	79·43	80·49	81·68	82·67	83·61	84·20	84·69	84·83	*84·84*	84·34	83·48	82·63	81·99	81·37	80·81	80·31	79·91	81·38
Apr.	81·79	81·43	81·08	80·79	80·66	*80·52*	80·71	81·60	82·80	84·36	85·11	85·45	86·76	87·17	87·29	*87·43*	87·33	87·03	86·35	85·21	84·32	83·31	82·52	81·91	81·50	83·89
May	84·15	83·63	83·43	83·17	*82·93*	83·03	83·75	84·59	85·72	86·62	87·49	88·27	88·93	89·33	89·75	*89·84*	89·79	89·69	88·95	87·95	86·58	85·91	85·34	84·89	84·48	86·41
June	86·62	86·28	85·95	*85·60*	85·76	85·92	86·66	87·42	88·24	88·91	89·43	89·61	90·23	90·75	90·79	*91·32*	91·23	91·14	91·03	90·66	89·37	88·47	87·63	87·04	86·64	88·59
July	88·45	88·13	87·75	87·46	*87·30*	87·50	88·06	88·92	89·79	90·77	91·42	92·17	92·75	93·29	*94·11*	93·90	93·92	93·59	93·38	92·65	91·07	90·42	89·69	89·21	88·58	90·65
Aug.	87·87	87·45	87·22	86·93	86·65	*86·54*	86·91	87·60	88·43	89·46	90·32	91·26	91·70	92·09	92·49	92·79	*92·84*	92·67	92·31	91·12	90·15	89·37	88·71	88·11	87·76	89·62
Sept.	86·99	86·69	86·56	86·48	86·38	86·27	*86·18*	86·49	87·10	87·78	88·51	89·15	89·68	89·97	90·19	*90·32*	89·98	89·74	88·94	88·42	88·01	87·67	87·37	87·13	86·90	88·00
Oct.	83·75	83·64	83·54	83·44	83·33	83·16	*83·08*	83·19	83·75	84·58	85·69	86·55	87·25	87·74	88·12	*88·28*	87·77	86·92	85·96	85·29	84·69	84·26	84·04	84·01	83·72	85·08
Nov.	80·58	80·42	80·40	80·21	*80·15*	80·18	80·24	80·18	80·25	80·75	81·37	81·99	82·48	82·78	*82·90*	82·83	82·43	81·97	81·62	81·24	80·99	80·85	80·61	80·49	80·40	81·17
Dec.	78·52	78·48	78·41	78·41	78·29	78·07	77·77	77·64	*77·64*	77·64	77·93	78·61	79·36	79·80	*79·90*	79·88	79·53	79·16	79·03	78·84	78·80	78·67	78·53	78·49	78·45	78·62
Annual	82·44	82·40	82·22	82·04	81·92	*81·89*	82·08	82·45	83·03	83·75	84·47	85·17	85·81	86·25	86·56	*86·65*	86·45	86·09	85·59	84·96	84·26	83·76	83·30	82·95	82·67	84·05

The initial 2 or 3 of the readings is omitted, i.e. 275·00 degrees Absolute is printed 75·00.

Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$.

Maximum, minimum and daily mean values in degrees Absolute for each day 0h. to 24h., G.M.T.
The initial 2 or 3 of the values is omitted, i.e. 275·0° is printed 75·0°. Add 0·16° to obtain temperature in degrees Kelvin where $T(°K.) = t(°C.) + 273·16$

165 KEW OBSERVATORY: North-wall screen: h_t(height of thermometer bulb above ground) = 3·0 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	75·5	70·2	73·2	83·0	80·4	81·5	85·2	76·3	81·1	86·6	83·8	85·0	83·1	*73·4*	*78·2*	89·3	83·9	86·1
2	79·2	74·4	76·7	82·9	78·9	81·0	79·7	73·9	76·6	86·1	82·0	84·6	84·5	74·0	79·1	90·1	83·5	86·6
3	80·3	75·1	78·0	79·0	76·1	77·8	80·0	*72·2*	*76·2*	85·8	80·1	82·6	82·4	76·1	78·5	93·3	84·3	88·4
4	75·7	73·0	74·5	85·0	78·7	82·1	83·4	75·5	79·2	84·2	79·0	81·7	85·2	76·0	80·4	90·9	83·6	87·2
5	76·8	72·0	74·9	85·6	80·1	82·6	82·1	74·5	79·1	87·9	80·0	83·7	85·4	77·8	81·7	90·9	84·4	87·6
6	76·4	70·2	73·7	82·8	79·7	80·6	84·1	79·9	81·6	87·8	78·0	82·8	89·3	84·8	86·8	90·4	87·3	88·6
7	77·0	72·3	74·8	84·9	78·8	82·3	84·0	79·8	81·8	81·8	77·9	80·1	95·7	84·9	89·3	91·6	86·0	89·3
8	75·6	72·5	74·3	81·4	77·7	79·6	83·7	77·2	80·7	84·1	75·9	79·5	98·5	87·9	92·7	90·2	84·9	87·4
9	74·9	72·6	73·9	81·2	77·5	79·5	84·2	74·0	79·0	86·1	76·0	80·9	94·3	85·4	90·4	89·1	83·4	86·3
10	74·9	72·5	73·7	81·7	74·7	78·0	85·0	78·1	80·8	90·2	77·4	83·7	94·9	82·2	88·7	88·5	84·5	86·6
11	74·4	72·1	73·3	81·5	74·8	77·2	83·0	75·4	80·6	95·1	82·3	86·7	99·6	85·3	92·3	91·2	86·4	88·7
12	76·8	74·4	76·0	85·8	77·0	81·5	83·2	72·8	78·3	91·6	83·4	87·1	*01·3*	85·9	*93·8*	90·0	84·5	87·1
13	76·8	75·1	76·2	84·2	78·8	82·1	86·3	73·7	79·9	93·1	80·2	86·0	94·7	84·5	90·0	93·2	83·5	87·6
14	76·4	73·9	74·7	83·8	77·0	79·9	88·2	75·1	81·0	90·0	80·0	85·6	90·6	83·6	87·0	91·2	84·0	87·8
15	78·4	73·6	76·1	78·7	75·7	*77·1*	85·0	76·0	79·4	94·6	86·0	89·0	92·5	84·2	88·1	93·2	85·2	88·6
16	77·6	73·8	75·5	80·5	75·9	78·7	87·1	78·9	82·2	*97·3*	84·1	90·7	95·1	86·0	89·7	90·4	83·3	87·1
17	80·3	77·3	78·4	83·2	79·8	81·5	85·4	78·9	82·1	97·1	83·0	90·4	96·6	85·5	90·8	92·9	*81·2*	87·6
18	*81·4*	74·0	79·2	*89·2*	81·8	83·9	84·9	75·1	80·5	97·1	83·7	*90·7*	95·3	84·7	89·8	97·6	81·8	89·7
19	77·1	72·8	75·1	86·1	81·8	83·7	83·3	80·7	82·3	94·2	82·5	88·5	87·2	83·5	85·3	*98·0*	83·5	92·0
20	75·1	70·9	73·1	85·7	76·8	83·0	86·1	79·4	82·2	94·3	80·5	88·0	89·7	82·4	86·3	96·8	86·2	91·9
21	74·8	70·3	72·2	83·2	*72·2*	78·1	86·4	75·3	80·9	87·8	80·9	85·0	91·0	82·0	86·4	94·3	85·0	89·7
22	74·9	71·2	72·9	82·2	74·3	79·1	89·2	76·3	82·4	85·4	78·5	81·9	91·7	82·7	86·6	97·1	84·6	91·4
23	73·8	70·1	72·6	81·8	76·7	79·5	*93·5*	77·4	85·5	85·1	77·1	81·1	89·9	81·7	85·3	96·2	88·9	92·5
24	71·7	68·9	70·2	82·0	72·3	77·3	90·9	79·4	*85·8*	87·0	77·9	81·9	86·7	80·0	82·6	96·9	89·4	*92·7*
25	71·6	66·2	69·2	83·0	76·9	80·4	85·8	82·0	84·0	91·2	77·3	83·9	91·6	79·4	85·7	97·2	86·9	92·2
26	70·9	*65·9*	*68·5*	86·6	82·5	*84·4*	84·3	79·3	81·8	87·0	78·0	82·2	87·6	83·7	85·2	91·5	86·7	89·2
27	71·6	67·0	69·9	87·3	81·8	84·1	87·0	79·5	82·5	84·9	77·0	81·7	89·3	80·5	84·8	90·8	84·0	87·3
28	74·2	70·2	72·3	83·2	79·6	81·5	87·4	82·1	84·2	80·4	73·7	78·1	89·2	78·0	84·3	86·8	82·4	*85·3*
29	73·5	67·0	70·8				87·8	83·1	85·0	82·0	73·7	77·5	90·3	82·8	86·0	91·2	84·7	87·7
30	79·1	71·8	75·1				86·7	80·2	83·0	79·8	*73·3*	*75·9*	89·2	80·3	85·7	90·5	84·6	87·4
31	81·3	76·9	*79·4*				85·2	80·9	83·1				90·3	84·4	87·2			
Mean	76·1	71·9	74·1	83·4	77·8	80·6	85·4	77·5	81·4	88·5	79·4	83·9	91·1	82·1	86·4	92·4	84·7	88·6

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean	Max.	Min.	Mean
	degrees Absolute																	
1	90·7	84·6	*87·0*	91·1	87·4	89·1	91·6	85·0	88·0	89·2	83·7	86·6	86·2	79·5	83·4	*85·3*	77·4	81·5
2	90·5	84·0	87·1	98·2	84·0	91·0	93·7	86·9	89·9	88·2	81·8	85·8	85·1	83·9	84·4	85·0	79·2	82·3
3	94·2	*82·7*	88·7	99·8	84·3	92·1	92·1	86·8	88·9	89·3	83·5	86·8	88·1	82·8	84·9	80·9	75·5	78·9
4	90·0	85·9	88·6	*01·0*	85·0	*93·0*	88·7	87·2	87·8	84·7	80·5	83·2	*88·6*	83·5	*85·8*	82·6	72·4	77·4
5	98·0	88·4	92·6	96·5	86·2	91·5	89·6	85·8	88·1	89·3	79·4	84·0	86·3	83·7	84·8	83·0	77·7	80·4
6	97·6	87·1	92·1	90·6	83·9	86·9	89·2	84·7	86·9	89·9	80·6	84·7	85·6	80·2	83·1	78·7	73·5	76·9
7	95·8	87·6	91·2	87·8	*82·4*	*85·5*	91·5	85·5	88·2	88·3	80·5	83·6	84·0	79·1	81·7	77·7	71·7	75·2
8	97·1	83·9	90·6	88·9	85·2	86·9	88·2	85·8	86·8	89·7	81·0	84·9	87·2	81·9	84·4	77·2	72·5	74·6
9	98·7	86·9	92·3	90·0	85·0	87·2	89·8	84·8	87·3	88·4	78·5	83·2	83·5	79·9	81·9	74·3	70·7	*72·3*
10	90·5	87·1	88·4	97·6	86·3	92·1	92·2	86·1	88·7	91·1	80·0	85·9	83·0	77·5	80·5	75·7	*70·5*	73·6
11	94·3	85·3	88·9	94·9	84·4	90·2	93·0	89·4	91·0	*94·2*	82·8	87·5	82·6	77·2	79·7	80·1	73·3	76·7
12	97·6	86·3	92·0	94·7	88·7	91·3	*96·8*	89·9	*92·8*	91·5	85·9	87·7	82·0	78·0	80·2	79·1	74·2	77·0
13	99·3	89·1	*94·5*	90·9	86·2	88·5	91·6	86·8	89·5	89·4	80·0	86·3	83·3	80·3	81·4	82·5	78·9	80·6
14	99·4	89·4	93·3	93·4	87·2	89·5	89·3	86·7	88·1	86·5	81·0	83·6	81·9	77·2	80·5	78·4	73·8	77·0
15	*01·7*	89·6	93·8	93·8	86·7	89·9	90·9	85·3	88·0	89·5	79·3	84·2	81·3	76·5	78·9	82·5	77·9	80·3
16	92·6	85·8	89·4	93·2	84·9	88·9	94·8	87·8	91·0	89·3	78·0	82·9	80·2	75·6	77·8	84·9	82·1	*83·2*
17	96·6	83·0	90·5	95·8	87·5	91·0	96·7	87·4	92·1	88·2	83·8	85·6	81·5	78·2	80·0	84·0	82·0	83·0
18	00·0	87·8	93·4	92·0	86·5	89·3	94·1	89·0	91·2	86·8	82·2	84·7	82·2	78·5	80·9	83·6	82·1	83·0
19	94·1	88·3	91·4	89·0	85·9	87·3	93·0	87·2	89·8	91·0	78·9	84·5	82·5	79·1	81·0	83·2	75·3	81·0
20	92·9	88·2	90·1	92·1	85·1	88·2*	90·5	87·1	89·5	89·0	79·6	85·4	82·7	78·9	80·8	80·9	72·1	76·6
21	94·8	89·0	91·5	92·8	86·0	89·5	90·4	84·3	87·4	89·7	87·4	*88·3*	85·0	82·3	83·8	80·0	77·4	78·5
22	94·0	87·9	90·7	91·3	87·1	89·0	90·4	83·8	87·6	89·0	81·9	86·2	85·1	80·9	83·5	80·5	77·9	79·3
23	97·2	87·2	91·7	92·4	85·9	88·9	88·4	82·6	85·2	89·1	83·8	86·6	81·1	79·7	80·4	82·6	74·6	79·5
24	96·2	87·1	91·4	90·9	87·3	89·4	88·2	83·8	85·4	88·8	83·8	86·3	81·7	75·2	79·8	82·6	79·7	81·0
25	95·2	86·3	91·6	93·1	86·0	90·4	86·7	80·8	*83·3*	86·3	83·2	84·9	81·1	77·8	79·4	82·4	79·6	80·8
26	91·7	85·6	89·4	95·6	83·4	89·1	88·1	80·9	84·8	86·8	83·8	84·9	82·5	76·2	79·6	82·1	78·2	80·1
27	92·1	85·3	88·2	97·1	85·1	91·1	90·8	84·0	87·4	87·1	82·2	84·4	79·1	73·5	*76·2*	84·2	80·3	82·3
28	93·3	85·6	89·1	97·7	87·7	92·6	89·0	82·7	85·7	87·3	84·3	85·9	79·2	*73·2*	76·6	80·5	74·9	77·8
29	94·1	84·5	89·6	92·6	88·8	90·5	89·9	*80·0*	83·9	87·0	82·0	84·7	81·9	78·1	79·9	79·4	76·3	77·9
30	95·0	86·6	90·2	91·9	87·4	89·5	90·0	80·1	85·5	88·2	78·2	82·5	82·3	77·4	79·8	78·4	71·0	75·0
31	94·5	87·7	90·7	93·7	86·0	88·9				88·2	*76·2*	*81·6*				75·2	71·9	73·6
Mean	95·2	86·6	90·7	93·6	85·9	89·6	91·0	85·3	88·0	88·7	81·5	85·1	83·2	78·9	81·2	80·9	76·0	78·6
									Annual	87·5	80·7	84·1						

MEAN RELATIVE HUMIDITY AND VAPOUR PRESSURE FOR EACH DAY

Mean percentages from readings at exact hours 0h. to 24h., G.M.T.; vapour pressure from daily mean temperature and relative humidity

166 KEW OBSERVATORY: North-wall screen: h_t = 3·0 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.	Rel. hum.	Vap. press.
	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.	%	mb.
1	88·8	5·5	85·3	9·5	72·1	7·8	*89·1*	12·5	*64·3*	*5·7*	72·5	10·9	75·7	12·1	69·6	12·7	80·7	13·7	78·0	12·1	88·9	11·2	89·0	9·9
2	93·7	7·5	86·9	9·3	60·3	*4·8*	70·0	9·6	65·4	6·2	74·2	11·5	71·1	11·4	61·0	12·6	72·6	14·0	83·0	12·3	94·2	12·7	90·5	10·6
3	88·8	7·8	81·6	7·0	63·2	4·9	66·3	7·9	85·5	7·7	71·5	12·5	70·0	12·5	70·9	15·7	79·7	14·4	78·5	12·4	91·7	12·8	80·8	7·5
4	70·7	4·8	84·2	9·7	78·0	7·4	72·9	8·2	70·8	7·3	69·4	11·2	87·5	15·5	65·0	15·2	92·0	15·5	93·4	11·6	89·4	*13·2*	91·0	7·6
5	77·8	5·4	90·2	10·8	82·7	7·8	65·6	8·4	*91·1*	10·2	79·0	13·1	76·6	17·5	66·0	14·1	81·5	14·0	83·7	11·0	92·9	12·9	70·5	7·3
6	93·7	6·0	93·5	9·8	72·9	8·2	77·5	9·4	84·5	13·3	*90·2*	16·0	69·7	15·4	75·2	11·9	67·2	10·7	84·5	11·6	85·0	10·5	65·8	5·3
7	79·9	5·6	83·9	9·8	72·5	8·2	80·0	8·1	78·3	14·5	74·0	13·7	*60·0*	12·5	79·7	11·6	*64·6*	11·2	88·2	11·3	90·4	10·2	87·3	6·2
8	74·6	5·0	90·5	8·8	71·7	7·5	78·3	7·6	70·4	16·1	75·5	12·4	64·8	13·0	84·9	13·5	85·3	13·4	81·6	11·4	82·3	11·1	*60·8*	*4·2*
9	88·4	5·8	*74·0*	7·2	71·7	6·7	63·0	6·7	75·1	14·9	75·0	11·5	69·1	15·5	82·6	13·4	80·5	13·1	88·3	11·0	74·7	8·5	73·7	4·3
10	82·2	5·3	81·2	7·1	70·3	7·4	72·3	9·3	71·6	12·8	90·0	14·0	*92·3*	16·1	*60·7*	13·5	83·0	14·8	84·6	12·6	78·1	8·1	91·5	5·8
11	81·2	5·1	93·9	7·7	66·8	7·0	71·5	11·2	74·7	16·7	81·6	14·6	80·2	14·5	74·9	14·7	*92·9*	19·2	82·4	13·6	80·2	7·9	92·3	7·3
12	92·0	7·0	93·5	10·4	80·3	7·2	71·7	11·5	70·1	*17·2*	72·0	11·6	71·8	15·8	78·9	16·6	85·5	*19·7*	88·7	14·8	83·3	8·5	90·4	7·3
13	81·5	6·3	81·5	9·4	80·0	8·0	72·7	10·9	67·5	13·1	66·2	11·0	62·3	16·0	85·5	15·1	84·2	15·8	78·8	12·0	80·0	8·8	76·4	8·0
14	84·2	5·8	82·3	8·2	79·4	8·5	81·7	11·9	73·3	11·7	72·8	12·3	81·8	*19·5*	84·2	15·8	87·4	15·0	85·4	10·9	82·3	8·5	83·7	6·8
15	88·9	6·8	*95·5*	7·8	81·5	7·8	78·3	*14·2*	69·3	11·9	76·3	13·5	76·3	18·7	74·3	14·3	82·3	14·0	82·7	11·0	81·3	7·5	92·7	9·5
16	96·0	7·0	91·2	8·3	71·2	8·3	68·5	13·7	76·1	14·5	65·2	*10·5*	71·3	13·3	68·3	12·3	83·4	17·2	92·0	11·2	72·5	*6·2*	91·1	*11·4*
17	81·8	7·3	94·5	10·5	70·6	8·2	66·5	13·2	64·8	13·2	70·0	11·6	68·1	13·6	69·3	14·3	81·2	18·0	83·8	12·2	*70·6*	7·1	82·9	10·2
18	82·1	7·8	92·3	12·0	75·9	7·9	*57·1*	11·5	73·2	14·0	63·0	12·0	62·2	14·9	76·2	14·1	80·6	16·9	79·7	10·9	80·5	8·6	78·3	9·6
19	*64·1*	4·6	95·0	*12·3*	88·6	10·4	68·7	12·2	77·6	11·1	60·2	13·2	71·0	15·0	70·7	*11·5*	81·5	15·6	83·6	11·3	84·4	9·1	90·6	9·7
20	73·7	4·5	76·3	9·4	68·3	8·0	69·3	11·8	87·3	13·3	73·8	*16·1*	76·1	14·8	77·3	13·4	89·5	16·8	92·9	13·4	96·8	10·2	97·1	7·7
21	77·0	4·4	82·5	7·3	75·2	8·0	62·7	8·8	80·7	12·4	79·2	15·1	82·7	17·6	84·2	15·8	85·6	14·1	*96·5*	*16·8*	*98·6*	12·8	84·9	7·7
22	86·0	5·2	91·2	8·6	78·5	9·3	60·5	6·9	73·3	11·4	64·4	13·6	69·4	14·1	85·1	15·5	70·8	11·8	84·5	12·8	96·6	12·3	90·1	8·6
23	87·1	5·2	89·9	8·7	66·0	9·6	61·8	6·7	81·9	11·7	70·7	16·0	69·7	15·0	73·3	13·2	73·7	10·5	83·7	13·0	90·3	9·3	95·3	9·2
24	96·4	4·7	82·3	*6·9*	*55·5*	8·2	67·2	7·7	67·5	8·1	64·4	14·8	66·0	14·0	85·5	16·0	73·9	10·6	80·4	12·3	88·9	8·8	88·7	9·5
25	93·0	4·2	82·7	8·5	80·6	10·6	69·5	9·1	74·7	11·0	*59·9*	13·3	68·8	14·7	84·5	16·8	69·5	*8·7*	82·0	11·4	94·2	9·1	87·3	9·2
26	91·5	*3·8*	81·9	11·0	76·0	8·6	85·4	9·9	79·5	11·3	63·0	11·6	76·6	14·3	76·3	14·0	79·1	10·9	*74·7*	10·4	83·3	8·1	94·0	9·5
27	87·0	4·1	79·9	10·6	70·3	8·4	68·0	7·6	74·7	10·3	65·0	10·6	67·1	11·6	70·7	14·7	79·2	13·0	74·8	*10·1*	81·7	6·3	86·3	10·1
28	78·4	4·5	80·3	8·9	*90·9*	*12·2*	72·7	6·4	80·8	10·8	88·0	12·6	61·7	*11·3*	78·1	17·8	79·7	11·7	89·9	13·4	90·8	7·2	91·6	7·9
29	89·7	4·6			84·3	11·8	70·2	5·9	68·6	10·3	81·7	13·7	72·0	13·6	*89·8*	*18·0*	85·7	11·2	92·1	12·7	89·7	8·9	86·5	7·5
30	96·3	6·9			69·7	8·6	69·5	*5·2*	70·9	10·4	74·7	12·3	69·4	13·6	84·4	15·8	83·4	12·1	90·7	10·8	83·9	8·3	93·3	6·6
31	*97·7*	*9·4*			79·2	9·8			72·9	11·8			70·3	14·2	75·3	13·6			94·3	10·5			*97·6*	6·2
Mean*	85·3	5·7	86·3	9·1	74·3	8·3	70·9	9·5	74·7	11·8	72·8	12·9	72·0	14·6	76·2	14·4	80·5	13·9	85·1	12·0	85·9	9·5	86·2	8·0

* Mean of the column.

RELATIVE HUMIDITY

Monthly and annual means of values at exact hours, G.M.T.

167 KEW OBSERVATORY: h_t = 3·0 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	per cent.																									
Jan.	88·7	88·7	88·8	88·6	88·0	88·1	87·7	87·4	87·1	87·1	85·6	83·4	80·5	78·9	*77·8*	78·8	79·9	81·3	83·9	85·1	86·4	86·9	88·8	*89·5*	89·1	85·3
Feb.	91·7	92·8	*93·0*	92·2	92·5	91·9	91·1	90·0	89·8	89·4	86·8	83·6	80·9	77·7	75·2	*74·8*	76·6	79·9	83·3	85·7	86·9	87·3	88·9	90·5	91·5	86·3
Mar.	82·0	83·8	84·9	85·4	86·1	*86·5*	*86·5*	85·2	83·5	79·5	73·9	69·5	64·5	60·9	57·8	*56·5*	56·6	60·4	64·3	69·4	72·7	75·7	78·2	80·5	82·0	74·3
Apr.	82·2	84·6	86·7	87·6	*88·5*	88·0	87·5	82·9	77·0	69·2	64·0	60·0	56·2	54·1	*51·8*	53·3	53·8	55·9	57·9	62·9	67·3	73·4	77·9	80·6	81·6	70·9
May	85·1	86·9	86·5	87·4	*88·3*	88·0	35·8	81·6	77·3	71·3	68·2	64·0	61·7	61·6	60·1	*60·0*	60·1	61·8	65·7	70·7	76·5	79·3	81·8	83·7	85·4	74·7
June	83·9	85·6	85·6	86·1	*87·0*	85·5	81·9	77·3	71·9	68·5	65·3	64·0	63·6	61·3	62·3	*60·8*	61·7	62·1	61·8	63·9	70·7	74·9	79·2	81·9	84·1	72·8
July	81·8	83·8	85·3	86·3	*86·9*	86·0	84·0	79·8	76·0	71·0	67·7	64·1	61·5	60·1	58·0	*57·3*	*57·3*	59·1	61·1	63·7	69·1	73·1	76·6	78·4	81·2	72·0
Aug.	85·1	85·6	86·6	87·3	88·4	*88·8*	87·3	83·9	80·1	75·8	71·5	66·7	65·4	63·5	62·4	*62·3*	62·5	63·5	64·7	71·4	76·9	80·3	83·5	85·1	85·7	76·2
Sept.	85·6	86·5	87·6	87·9	88·3	88·5	*89·4*	88·2	85·8	81·8	77·0	74·2	71·6	70·7	68·9	*68·0*	70·1	72·3	76·8	78·7	81·1	83·1	84·8	86·0	85·8	80·5
Oct.	90·7	91·0	91·1	91·1	91·5	92·2	92·2	*92·5*	91·8	89·1	83·9	79·8	77·1	73·5	70·7	70·2	72·3	77·2	82·1	85·1	87·1	89·2	90·8	89·9	90·8	85·1
Nov.	89·2	90·0	90·2	90·7	91·0	90·6	90·5	*91·2*	90·7	89·1	85·9	83·3	80·1	78·5	77·4	*76·9*	79·0	81·9	83·2	85·0	86·7	85·9	86·9	88·2	88·8	85·9
Dec.	89·6	89·2	89·5	88·1	88·3	87·7	87·5	88·0	88·1	87·3	85·8	84·0	82·7	*81·3*	81·6	*81·3*	82·4	84·3	85·0	85·7	86·5	87·8	87·5	88·9	*90·0*	86·2
Annual	86·0	87·4	87·9	88·2	*88·7*	88·5	87·6	85·7	83·2	79·9	76·2	73·0	70·4	69·5	67·0	*66·6*	67·6	69·9	72·6	75·6	79·0	81·4	83·7	85·2	86·3	79·2

VAPOUR PRESSURE

Monthly and annual means of values at exact hours, G.M.T., computed from corresponding mean values of temperature and relative humidity

168 KEW OBSERVATORY: h_t = 3·0 m. 1945

	Hour G.M.T. 0	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean*
	millibars																									
Jan.	5·6	5·7	5·6	5·6	5·5	5·6	5·5	*5·5*	5·5	5·6	5·6	5·6	5·7	5·7	5·7	5·7	5·6	5·6	5·6	5·7	5·8	5·8	*5·8*	5·8	5·8	5·7
Feb.	9·0	9·1	9·0	9·0	9·0	8·9	8·8	8·7	*8·7*	8·8	9·1	9·1	9·2	9·1	9·0	9·1	9·1	9·2	9·2	*9·2*	9·1	9·0	9·0	9·0	9·0	9·0
Mar.	8·1	8·0	8·0	7·9	7·9	7·9	*7·8*	7·9	8·0	8·2	8·3	*8·4*	8·3	8·1	8·0	7·9	7·9	8·1	8·2	8·3	8·3	8·3	8·3	8·2	8·2	8·1
Apr.	9·3	9·3	*9·4*	9·3	9·3	9·1	9·2	9·3	9·3	9·3	9·1	9·0	8·8	8·7	*8·5*	8·8	8·8	8·9	8·9	8·9	9·0	9·2	9·3	9·2	9·1	9·1
May	11·3	11·1	10·9	10·8	*10·8*	10·8	11·1	11·2	11·4	11·1	11·3	11·1	11·2	11·4	11·5	11·5	11·5	11·8	11·9	*12·0*	11·9	11·8	11·7	11·6	11·6	11·4
June	13·1	13·1	12·8	12·6	12·8	12·7	12·8	12·7	12·4	12·4	12·2	*12·1*	12·5	12·5	12·7	12·8	12·9	12·9	12·8	12·9	13·2	13·2	*13·2*	13·1	13·1	12·8
July	14·3	14·4	14·3	14·2	*14·1*	14·2	14·4	14·4	14·5	14·4	14·4	14·2	14·2	14·3	14·5	14·2	14·2	14·3	*14·6*	14·6	14·4	14·6	14·6	14·4	14·4	14·4
Aug.	14·4	14·1	14·1	13·9	13·8	*13·8*	13·9	13·9	14·0	14·2	14·1	14·0	14·1	14·0	14·1	14·4	14·5	14·5	14·5	14·8	*15·1*	15·0	14·9	14·6	14·4	14·3
Sept.	13·7	13·6	13·6	13·6	13·6	13·5	13·5	13·6	13·8	13·8	13·6	13·6	13·6	13·7	13·5	*13·5*	13·6	13·8	*13·9*	13·8	13·8	13·9	13·9	13·9	13·6	13·7
Oct.	11·7	11·7	11·6	11·5	11·5	11·4	*11·4*	11·5	11·8	12·2	12·3	12·4	*12·5*	12·3	12·1	12·2	12·1	12·3	12·3	12·2	12·0	11·9	11·9	11·8	11·7	11·9
Nov.	9·3	9·3	9·3	9·2	9·2	9·2	9·2	9·3	9·3	9·4	9·5	*9·6*	9·5	9·5	9·4	9·3	9·3	9·4	9·3	9·3	9·3	9·1	*9·1*	9·1	9·1	9·3
Dec.	8·1	8·1	8·0	7·9	7·9	7·7	7·5	7·5	7·5	*7·4*	7·4	7·7	7·9	8·0	*8·1*	8·1	8·0	8·0	8·0	7·9	8·0	8·0	7·9	8·0	8·1	7·9
Annual	10·2	10·3	10·2	10·2	10·1	*10·1*	10·1	10·2	10·2	10·3	10·3	10·4	10·4	*10·6*	10·4	10·4	10·5	10·5	10·6	10·6	10·6	10·5	10·5	10·5	10·4	10·4

* Mean of values, 1,2,.....23,½(0 + 24).

Amount in millimetres, duration in hours and maximum rate of fall for each day 0h. to 24h., G.M.T.

169 KEW OBSERVATORY: h_r(height of receiving surface above M.S.L.) = height of station above M.S.L. + height of receiving surface above ground = 5·5 m. + 0·53 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	...	...	...	1·2	2·3	6	...	...	...	1·0	0·9	15	...	...	...	4·6	0·9	33
2	0·3	0·7	...	0·3	0·8	...	...	...	...	1·5	2·0	6	...	...	...	3·6	1·2	34
3	4·1	3·2	23	3·0	1·9	7	...	...	...	0·4	0·2	*16*	*16·5*	*6·7*	20	3·7	1·8	14
4	...	...	...	4·2	3·0	8	1·3	3·1	...	...	...	...	...	...	...	0·4	0·5	11
5	...	...	...	0·6	1·0	6	...	...	...	1·7	2·1	8	4·2	8·6	6	0·7	2·4	...
6	0·1	...	...	3·9	5·0	6	...	...	...	0·8	3·8	...	0·3	0·5	6	4·6	5·7	...
7	0·3	0·3	7	0·1	0·3	...	...	...	...	0·1	0·4	...	...	...	...	0·9	1·5	...
8	...	...	...	2·1	2·2	7	...	...	...	...	...	...	1·7	0·6	39	*4·8*	0·9	58
9	5·0	4·5	...	0·8	1·9	...	...	...	...	...	...	...	0·3	0·3	...	0·4	0·3	8
10	0·1	0·3	...	5·8	4·3	11	...	...	...	...	...	...	0·1	0·4	...	1·7	3·4	...
11	1·6	3·6	...	5·8	6·8	6	...	...	...	1·0	1·1	12	...	...	...	...	...	...
12	2·1	4·9	7	*6·1*	*7·4*	7	...	...	...	0·1	0·2	...	...	...	...	0·4	0·5	6
13	0·1	...	...	0·6	0·9	*14*	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	0·1	0·1	...	...	...	...	...	...	...	...	...	...	...	...	...
16	0·1	0·2	...	...	...	...	0·5	0·8	6	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	9·4	4·4	*78*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	1·3	1·9	6	...	...	...	...	...	...	...	...	...
20	4·2	0·5	15	...	...	...	...	...	...	...	...	...	9·8	3·0	26	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	12·1	5·7	29	4·5	2·4	24
22	0·6	0·5	...	...	...	...	...	...	...	...	...	...	0·2	1·0	...	1·0	0·8	...
23	1·3	1·6	...	0·7	1·1	6	...	...	...	...	...	...	13·7	3·1	*68*	1·0	0·9	6
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	1·2	2·3	6	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	*11·6*	*9·6*	11	*9·0*	*7·4*	7	1·6	1·7	13	0·1	0·3	...
27	0·2	0·2	...	...	...	...	...	...	...	0·6	0·9	6	0·2	0·3	...	2·5	0·6	58
28	...	...	...	...	...	...	2·3	4·0	7	*9·0*	5·1	13	0·2	0·5	...	*4·8*	*5·8*	...
29	1·5	3·2	...				1·4	1·7	23	3·3	5·5	...	0·2	0·7	...	4·0	0·6	*62*
30	*9·8*	*8·8*	...				0·7	0·2	*26*	0·2	0·4	...	...	...	...	1·0	1·1	8
31	1·3	1·7	6				...	...	...				...	...	...			
Total	42·1	38·6	-	35·3	39·0	-	20·3	23·6	-	28·7	30·0	-	61·1	33·1	-	44·7	31·6	-

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate	Amount	Duration	Max. rate
	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.	mm.	hr.	mm./hr.
1	4·1	0·9	58	...	...	...	3·5	4·6	8	...	...	...	...	...	...	0·1	0·1	...
2	...	...	...	...	...	...	1·7	1·0	21	...	...	...	0·9	2·6	...	4·9	3·7	39
3	...	...	...	...	...	...	1·0	2·0	...	...	...	...	0·1	0·1	...	0·2	0·3	...
4	...	...	...	...	...	...	7·1	*5·9*	29	...	...	...	...	...	...	2·8	3·9	...
5	...	...	...	...	...	...	0·1	0·2	...	...	...	...	0·1	...	...	...	...	...
6	...	...	...	3·1	1·2	*60*	...	...	...	...	...	...	0·2	0·3	...	...	...	...
7	...	...	...	1·1	1·7	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	2·4	1·5	30	1·4	2·9	...	...	...	...	...	...	...	...	...	...
9	1·0	0·4	12	*11·5*	*6·7*	23	...	...	...	...	...	...	...	...	...	...	...	...
10	15·8	*5·9*	23	1·7	1·6	...	0·3	0·6	...	...	...	...	...	...	...	...	...	...
11	1·8	3·6	6	...	...	...	0·5	0·9	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	0·2	0·2	10	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	*7·3*	1·2	86	...	...	...	...	...	...	0·1	0·1	...
14	*24·7*	5·2	*142*	...	...	...	1·3	1·8	12	...	...	...	...	...	...	...	...	...
15	9·0	2·0	78	1·6	1·7	10	...	...	...	...	...	...	...	...	...	0·8	1·5	...
16	0·3	0·2	...	1·0	1·9	...	...	...	...	...	...	...	...	...	...	1·4	1·7	6
17	...	...	...	...	...	...	...	...	...	0·1	0·3	...	...	...	...	7·1	2·5	*44*
18	...	...	...	...	...	...	1·6	1·0	7	...	...	...	...	...	...	1·0	2·2	...
19	1·0	0·7	17	...	...	...	1·7	1·3	15	...	...	...	...	...	...	5·9	4·9	18
20	0·7	0·4	15	...	...	...	2·5	2·7	9	1·7	1·8	7	0·9	0·7	7	...	...	...
21	...	...	...	3·2	3·3	9	...	...	...	5·8	*9·6*	10	0·8	2·5	...	...	...	...
22	...	...	...	2·2	2·4	29	1·5	0·9	37	0·1	0·0	10	*4·4*	*2·9*	*9*	1·8	3·6	...
23	...	...	...	0·5	0·3	13	3·0	0·7	*91*	*12·0*	5·3	57	...	...	...	2·5	1·8	14
24	...	...	...	0·6	1·2	...	5·1	2·9	37	9·5	4·6	23	...	...	...	8·6	3·1	15
25	...	...	...	0·1	0·3	...	...	...	...	8·7	3·9	*86*	...	...	...	2·6	1·6	16
26	4·6	4·1	7	...	...	...	0·2	0·7	...	0·3	0·2	...	...	...	...	4·1	4·3	6
27	5·3	4·1	6	...	...	...	0·1	0·1	...	...	...	...	...	...	...	0·3	0·6	...
28	...	...	...	0·7	0·4	8	2·5	3·6	...	6·6	7·7	9	...	...	...	*19·2*	*13·4*	14
29	...	...	...	2·2	0·3	48	...	...	...	8·1	7·1	6	...	...	...	4·6	7·4	7
30	0·1	0·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...				...	...	...				0·2	...	...
Total	68·4	27·8	-	31·9	24·5	-	42·6	35·2	-	52·9	40·5	-	7·4	9·1	-	68·2	56·7	-

RAINFALL

Monthly and annual totals of amounts in sixty-minute periods between exact hours, G.M.T.

170 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	millimetres																								
Jan.	1·7	2·0	1·8	3·7	1·8	1·0	0·6	0·6	1·2	1·0	0·4	0·4	2·0	2·7	3·6	0·1	0·3	*5·5*	2·0	1·1	0·6	4·2	2·6	1·2	42·1
Feb.	1·4	1·6	*3·1*	2·0	2·3	0·9	1·7	1·3	1·2	2·4	2·0	1·5	2·0	1·1	1·1	1·9	2·2	0·1	1·2	0·1	0·2	0·3	2·1	1·6	35·3
Mar.	0·6	0·8	2·1	1·0	1·0	1·0	2·5	1·3	*3·6*	0·7	0·1	···	0·7	···	0·1	0·1	1·1	0·2	1·0	0·3	0·5	0·4	0·8	0·4	20·3
Apr.	0·9	2·7	2·8	1·1	0·7	0·2	0·1	0·5	···	···	···	0·5	0·9	1·0	2·5	*3·4*	2·5	0·1	0·7	0·5	1·0	1·7	2·4	2·5	28·7
May	2·1	0·2	0·2	···	0·1	···	0·1	0·5	0·6	1·8	1·1	0·8	6·7	2·7	*10·4*	3·1	2·2	6·7	6·6	9·3	3·9	1·2	0·6	0·2	61·1
June	1·6	0·2	···	0·3	1·0	0·8	0·3	2·2	5·1	2·9	3·9	3·0	4·0	*5·2*	0·5	0·8	3·0	0·1	0·9	4·0	0·3	0·6	2·7	1·3	44·7
July	6·4	4·0	2·3	0·9	0·3	3·3	4·1	6·0	1·1	1·6	···	0·9	1·8	1·1	0·3	0·3	1·6	4·0	1·2	0·9	0·6	···	7·6	*18·1*	68·4
Aug.	1·2	···	0·6	1·3	1·6	0·2	3·1	0·3	···	1·2	0·5	2·6	0·4	2·7	0·2	0·6	1·1	0·6	1·7	*4·3*	2·5	3·7	1·1	0·4	31·9
Sept.	1·7	2·6	4·0	1·6	1·0	*4·2*	1·7	2·4	2·6	1·7	2·4	0·9	1·7	0·1	2·2	3·0	0·7	0·6	0·2	3·0	0·4	2·3	1·2	0·4	42·6
Oct.	2·7	1·4	3·5	1·3	1·6	1·7	2·9	*7·1*	2·5	0·8	1·2	1·2	2·7	1·5	2·2	6·1	1·2	0·2	0·3	0·1	2·5	0·8	2·8	4·6	52·9
Nov.	···	0·3	0·1	···	0·1	0·1	···	0·7	0·5	···	0·5	*2·4*	1·5	0·2	0·1	···	···	···	···	···	···	0·9	···	···	7·4
Dec.	5·9	4·4	3·5	3·1	*7·0*	2·5	3·9	3·8	2·1	4·9	1·8	1·9	2·2	0·3	1·8	2·5	1·1	3·1	4·5	1·5	1·7	2·0	0·8	1·9	68·2
Annual	26·2	20·2	24·0	16·3	18·5	15·9	21·0	26·7	20·5	19·0	13·9	16·1	26·6	18·6	25·0	21·9	17·0	21·2	20·3	25·1	14·2	18·1	24·7	*32·6*	503·6

RAINFALL

Monthly and annual totals of durations in sixty-minute periods between exact hours, G.M.T.

171 KEW OBSERVATORY: h_r = 5·5 m. + 0·53 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24
	hours																								
Jan.	2·2	2·2	1·9	2·6	2·1	1·7	1·2	1·5	1·8	0·9	0·4	0·6	1·7	2·0	1·6	0·4	0·9	1·6	1·8	1·0	0·9	2·5	*2·8*	2·3	38·6
Feb.	1·9	2·5	*2·6*	2·0	2·5	1·8	1·3	1·7	1·9	2·0	2·3	2·3	2·0	1·7	2·4	1·2	1·0	0·3	0·9	0·3	0·3	0·7	1·7	1·7	39·0
Mar.	1·5	1·0	1·4	1·9	1·7	1·1	*2·0*	*2·0*	*2·0*	1·1	0·1	···	0·2	···	0·3	0·1	1·4	0·5	1·3	1·3	0·8	0·7	0·3	0·9	23·6
Apr.	1·4	2·5	*2·9*	2·2	1·7	0·8	0·3	0·6	···	···	···	0·5	1·1	1·0	1·6	1·2	2·2	0·4	1·7	1·7	1·3	1·9	2·0	1·0	30·0
May	1·9	1·2	0·6	···	0·1	···	0·5	1·3	1·4	1·8	1·2	1·2	2·5	1·2	*2·8*	1·8	1·8	1·8	1·9	2·6	2·7	1·0	1·0	0·8	33·1
June	1·8	1·1	···	0·7	1·7	0·9	0·8	2·1	3·1	*3·4*	2·5	2·1	2·7	1·8	0·3	1·2	0·5	0·4	0·8	0·4	0·4	0·2	1·1	1·6	31·6
July	2·1	2·2	*2·7*	2·4	1·1	1·0	1·7	1·0	1·0	1·3	0·2	0·3	0·5	1·0	0·8	0·2	1·0	1·5	0·9	0·3	0·4	···	1·6	2·6	27·8
Aug.	0·4	···	0·4	1·4	1·2	0·4	1·3	0·4	···	1·0	0·9	0·6	0·2	1·7	0·2	0·4	0·8	0·9	2·3	2·7	2·2	2·2	1·2	1·3	24·5
Sept.	0·8	1·6	2·3	1·4	0·5	2·0	2·5	3·0	*3·5*	2·4	2·8	0·8	2·3	0·4	0·4	0·6	1·2	0·6	0·5	1·6	0·7	1·2	1·3	0·8	35·2
Oct.	2·0	1·2	1·7	1·5	1·2	1·2	2·4	2·6	2·6	1·5	1·0	1·3	1·5	1·6	2·1	2·7	1·4	0·7	0·5	0·2	2·5	1·7	2·3	*3·1*	40·5
Nov.	···	0·7	0·7	···	0·1	0·1	···	*1·6*	*1·6*	···	0·4	*1·6*	0·9	0·6	0·2	···	···	···	···	···	···	0·6	···	···	9·1
Dec.	*3·7*	3·3	2·6	2·3	3·5	2·9	3·0	3·1	2·0	2·3	2·3	2·6	2·5	0·5	2·8	1·9	1·4	1·8	1·1	2·2	2·2	1·7	1·8	3·2	56·7
Annual	20·1	19·5	19·8	18·4	17·4	13·9	17·0	*20·9*	*20·9*	17·7	14·1	13·9	18·1	13·5	15·5	11·7	13·6	10·5	13·7	14·3	14·4	14·4	17·1	19·3	389·7

NOTES ON RAINFALL

172 KEW OBSERVATORY 1945

Dry Periods

The following definitions are adopted by the British Rainfall Organization.
An "absolute drought" is a period of at least 15 consecutive days to none of which is credited 0·2 mm. of rain or more
A "partial drought" is a period of at least 29 consecutive days, the mean daily rainfall of which does not exceed 0·2 mm.
A "dry spell" is a period of at least 15 consecutive days to none of which is credited 1·0 mm. of rain or more

"Absolute drought": September 29–October 19
"Partial drought": February 13–March 25
"Dry spell": February 13–March 3: September 29–October 19: October 30–November 21

Wet Periods

The following definitions are adopted by the British Rainfall Organization.

A "rain spell" is a period of at least 15 consecutive days to each of which is credited 0·2 mm. of rain or more
A "wet spell" is a period of at least 15 consecutive days to each of which is credited 1·0 mm. of rain or more

No "rain spells" or "wet spells" occurred in 1945.

Rainfall Duration

Hours	0·1–1·0	1·1–2·0	2·1–6·0	6·1–12·0	>12·0
Number of days	68	31	53	12	1

Continuous or Heavy Falls

The fall of the longest duration occurred on December 28 when 18 mm. fell in 12 hr. 36 min.

Heavy Falls in short periods

None occurred in 1945

Rate of Rainfall (Jardi recorder)

The highest instantaneous rate of rainfall recorded by this instrument was 142 mm./hr. at 23h. 15m. on July 14. The maximum rate exceeded 50 mm./hr. on January 18, May 23, June 8, 27 and 29. July 1, 14 and 15. August 6, September 13 and 23, October 23 and 25.

DURATION OF BRIGHT SUNSHINE AND TOTAL SOLAR RADIATION FOR EACH DAY

Solar radiation received on a surface perpendicular to the solar beam

173 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1945

	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	1·2	15	170	3·5	39	550	2·5	23	310	0·2	1	20	5·2	32	610	9·6	59	1660
2	0·2	3	···	1·6	18	180	8·7	*80*	1100	4·9	38	1090	7·6	51	1400	9·2	56	1230
3	0·1	1	20	5·0	55	420	8·5	77	900	8·5	65	1390	1·0	7	100	2·7	16	360
4	4·9	62	380	3·8	41	340	1·0	9	80	0·6	5	110	10·0	66	1380	10·0	61	1580
5	1·8	23	170	1·8	19	140	2·2	20	220	6·6	50	1000	···	···	···	1·7	10	320
6	0·7	9	50	···	···	···	0·7	6	70	1·5	11	160	4·9	32	650	0·1	1	10
7	1·2	15	120	3·6	38	300	0·1	1	···	···	···	···	5·9	39	990	9·9	60	1450
8	1·3	16	60	···	···	···	1·2	11	150	7·1	53	790	3·6	24	470	11·0	67	1840
9	0·2	3	10	5·8	61	870	8·2	72	1180	6·1	45	930	1·8	12	340	5·1	31	860
10	2·4	30	230	4·7	49	710	4·7	41	530	7·4	55	1080	2·4	16	300	···	···	···
11	1·1	14	80	···	···	···	···	···	···	4·6	34	720	8·0	52	1250	2·1	13	280
12	···	···	···	···	···	···	3·7	32	470	9·0	66	1520	11·8	82	2080	5·2	31	810
13	···	···	···	1·6	16	270	7·8	67	1180	10·0	73	1550	8·6	55	1430	11·9	72	2080
14	2·5	30	200	*8·1*	*82*	*1110*	8·4	72	1400	1·2	9	170	6·0	39	1090	6·2	37	1050
15	···	···	10	0·1	1	30	6·9	59	1150	7·2	52	850	11·6	75	1970	4·2	25	580
16	···	···	···	···	···	···	5·6	47	610	10·9	79	2110	11·2	72	2410	1·3	8	210
17	1·8	21	130	···	···	···	···	···	···	10·6	76	1920	*13·9*	*89*	*2700*	10·7	64	1680
18	···	···	···	2·4	24	280	7·6	63	1140	12·0	*85*	*2540*	5·2	33	680	*15·1*	*91*	*3220*
19	*5·5*	*65*	440	···	···	···	···	···	···	12·0	*85*	2010	0·2	1	10	13·7	82	2850
20	2·9	34	320	4·6	45	460	8·9	73	1520	8·3	59	1710	1·7	10	250	5·2	31	810
21	3·9	46	*560*	4·2	41	420	9·6	79	*1860*	5·6	40	790	6·5	41	1290	5·3	32	770
22	0·1	1	10	0·2	2	30	8·7	71	1720	*12·1*	*85*	1910	10·2	64	2430	11·0	66	2640
23	···	···	···	···	···	···	9·7	79	1750	5·9	41	670	3·4	21	410	11·0	66	2220
24	···	···	30	5·3	51	670	7·7	62	1590	7·7	53	1190	3·8	24	440	10·6	64	1820
25	···	···	···	···	···	···	···	···	···	4·0	28	640	5·2	33	910	10·0	61	1160
26	0·3	3	40	0·7	7	40	···	···	···	···	···	30	0·4	2	50	2·1	13	150
27	···	···	20	2·0	19	230	9·6	76	1540	2·5	17	390	6·7	41	1040	10·2	61	1930
28	4·0	45	210	···	···	···	···	···	···	6·5	44	1350	2·8	17	420	0·1	1	40
29	···	···	30				1·6	13	170	7·0	48	1170	11·5	71	1890	0·5	3	40
30	···	···	···				8·5	67	1580	2·5	17	470	9·5	59	1800	6·3	38	1240
31	···	···	···				0·5	4	70				8·4	52	1130			
Mean	1·16		110	2·11		250	4·60		720	6·08		1010	6·10		1030	6·73		1160

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation	Total for day	Per cent. of possible	Solar radiation
	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}	hr.	%	J./cm.^{2}
1	7·9	48	1260	0·5	3	30	0·3	2	20	···	···	···	4·7	48	770	1·9	23	200
2	2·5	15	180	*13·7*	*90*	*3200*	3·2	24	440	···	···	···	···	···	···	0·4	5	40
3	6·5	39	970	11·7	77	1750	1·6	12	230	0·5	4	40	3·0	32	330	4·7	57	*750*
4	0·1	1	···	13·4	88	3010	···	···	···	···	···	···	0·2	2	60	···	···	···
5	3·6	22	440	9·8	65	1370	···	···	···	6·6	58	990	···	···	···	3·7	46	610
6	12·6	77	2410	7·3	48	1190	0·5	4	30	4·6	41	460	0·2	2	10	*5·0*	*63*	650
7	12·9	79	2460	1·0	7	130	0·3	2	50	4·5	40	620	0·9	10	90	···	···	10
8	9·9	61	1640	1·0	7	140	···	···	···	7·8	70	1120	···	···	···	1·4	18	200
9	2·9	18	320	0·5	3	50	0·2	2	10	5·5	50	560	0·4	4	20	4·4	55	430
10	···	···	···	10·5	70	1840	1·0	8	140	*8·2*	*74*	*1380*	3·5	39	340	···	···	···
11	4·6	28	720	5·0	34	580	···	···	···	5·1	46	890	*7·0*	*77*	*1020*	0·1	1	10
12	8·4	51	1680	1·9	13	320	1·2	9	120	4·5	41	740	0·3	3	20	2·0	26	180
13	12·6	78	2330	···	···	···	2·6	20	500	5·1	47	530	3·0	34	230	0·6	8	90
14	3·8	24	720	2·5	17	280	···	···	···	3·3	31	330	···	···	···	2·0	26	200
15	9·2	57	1760	5·2	34	870	1·5	12	260	7·2	68	780	···	···	···	0·7	9	80
16	1·0	6	130	11·9	82	2580	1·6	13	140	4·4	41	400	3·0	34	460	1·0	13	60
17	9·3	57	2020	7·5	52	1090	2·0	16	300	1·1	10	100	···	···	···	···	···	···
18	3·4	21	660	0·5	3	40	5·6	45	770	···	···	···	0·6	7	60	···	···	···
19	7·2	45	1360	0·1	1	···	4·1	33	430	6·9	67	1120	···	···	90	0·9	12	40
20	5·1	32	700	···	···	···	0·7	6	120	2·0	19	290	···	···	···	1·5	19	210
21	4·4	27	420	3·4	24	440	2·9	24	630	···	···	···	···	···	···	0·4	5	70
22	8·3	52	1430	4·3	30	470	5·6	46	980	6·4	63	1150	···	···	···	···	···	···
23	*14·2*	*90*	*3200*	4·7	33	1070	*8·1*	*67*	*1620*	2·6	25	330	···	···	···	3·0	39	350
24	12·6	80	2450	···	···	···	0·6	5	60	3·2	32	420	···	···	20	0·2	3	10
25	3·3	21	310	0·9	6	70	6·0	50	700	···	···	···	1·2	14	150	1·4	18	190
26	1·5	9	150	10·7	77	1920	0·9	8	120	2·0	20	140	0·3	4	40	1·6	20	190
27	4·0	26	570	10·6	77	2120	3·1	26	430	3·6	36	430	4·0	48	430	0·2	3	50
28	11·7	75	2290	5·3	38	540	1·2	10	130	···	···	···	···	···	10	0·2	3	20
29	6·4	41	1060	0·6	4	60	5·4	46	980	2·2	22	270	···	···	···	1·2	15	160
30	3·4	22	590	···	···	···	3·6	31	570	6·4	66	1250	···	···	···	4·5	57	520
31	1·8	12	150	4·4	32	670				5·2	54	510				···	···	···
Mean	6·29		1110	4·80		830	2·13		330	3·52		480	1·08		140	1·39		170
								Annual Mean		3·83		610						

DURATION OF BRIGHT SUNSHINE

Monthly and annual totals between exact hours, local apparent time

174 KEW OBSERVATORY: h_s(height of recorder above ground) = 13·3 m. 1945

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total	Per cent. of possible
	hours																			%
Jan.	-	-	-	-	···	0·7	4·3	5·6	6·8	*6·9*	6·0	4·8	1·0	···	-	-	-	-	36·1	14
Feb.	-	-	-	···	0·4	5·1	8·1	8·5	*9·2*	8·1	7·5	6·7	4·4	1·0	···	-	-	-	59·0	21
Mar.	-	-	···	1·2	5·8	12·1	14·7	15·6	16·8	*18·2*	16·9	16·6	15·1	8·5	1·1	···	-	-	142·6	39
Apr.	-	···	1·2	7·0	14·5	16·3	16·1	17·7	18·2	*18·6*	17·9	16·5	14·3	13·1	8·5	2·1	0·5	-	182·5	44
May	···	0·5	6·6	13·8	14·4	15·6	17·0	*18·6*	16·5	14·5	14·6	13·6	14·6	12·4	8·9	6·2	1·2	···	189·0	39
June	···	4·6	12·0	13·6	14·9	*16·4*	15·1	13·3	11·7	12·5	12·9	14·4	12·5	13·3	15·3	12·7	6·8	···	202·0	40
July	···	1·3	8·7	11·9	12·2	12·0	13·7	13·1	14·1	15·6	15·8	14·2	14·9	*16·2*	15·6	12·0	3·8	···	195·1	39
Aug.	-	0·1	5·0	8·5	9·8	12·4	*13·0*	12·6	12·2	12·3	11·6	11·4	12·0	12·8	10·4	4·8	···	-	148·9	33
Sept.	-	-	0·1	0·7	4·1	4·0	4·9	6·5	7·3	*7·5*	6·1	6·4	7·2	6·9	2·1	···	-	-	63·8	17
Oct.	-	-	-	···	0·4	5·1	9·5	13·4	15·8	14·8	*17·6*	16·3	13·5	2·5	···	-	-	-	108·9	33
Nov.	-	-	-	···	···	2·2	4·5	4·8	*5·8*	5·2	4·5	3·7	1·5	0·1	-	-	-	-	32·3	12
Dec.	-	-	-	-	···	0·7	3·6	8·6	*10·2*	9·0	6·6	3·6	0·7	-	-	-	-	-	43·0	18
Annual	···	6·5	33·6	56·7	76·5	102·6	124·5	138·3	*144·6*	143·2	138·0	128·2	111·7	86·8	61·9	37·8	12·3	···	1403·2	32

SOLAR RADIATION RECEIVED ON A SURFACE PERPENDICULAR TO THE SOLAR BEAM

Monthly and annual totals between exact hours, local apparent time

175 KEW OBSERVATORY: h_s = 13·3 m. 1945

	Hour L.A.T. 3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total
	joules per square centimetre																		
Jan.	-	-	-	-	···	60	350	560	570	590	560	390	210	···	-	-	-	-	3290
Feb.	-	-	-	···	60	450	990	1020	1130	990	930	720	540	220	···	-	-	-	7050
Mar.	-	-	···	440	930	1600	2320	2520	2630	2940	2740	2430	2070	1320	340	10	-	-	22290
Apr.	-	···	290	1050	2280	2580	2440	3080	3330	3580	3320	2990	2180	1840	1110	250	···	-	30320
May	···	180	1020	2030	2630	2930	3050	3250	3130	2600	2470	2190	2460	1800	1350	730	130	···	31950
June	···	640	1730	2340	2460	2990	2950	2890	2190	2550	2340	2610	2210	2250	2390	1640	710	···	34890
July	···	250	1190	1860	2230	2400	2770	2560	2790	2970	2980	2610	2770	2670	2370	1600	360	···	34380
Aug.	-	20	560	1190	1560	2160	2340	2700	2400	2340	2350	2270	2120	1970	1320	500	30	-	25830
Sept.	-	-	···	60	430	500	930	950	1070	1160	1140	1010	1290	1040	190	···	-	-	9770
Oct.	-	-	···	···	150	650	1130	1810	2060	2130	2620	2190	1660	440	···	-	-	-	14840
Nov.	-	-	-	-	10	210	600	650	710	740	550	420	230	30	-	-	-	-	4150
Dec.	-	-	-	-	···	100	450	930	1320	1210	680	440	190	···	-	-	-	-	5320
Annual	···	1090	4790	8970	12740	16630	20320	22920	23330	23800	22680	20270	17930	13580	9070	4730	1230	···	224080

See Introduction for corrections to tabulated values for January February and March.

WIND

Mean speed and highest instantaneous speed recorded each day (0h. to 24h., G.M.T.) by the pressure-tube anemograph

176 KEW OBSERVATORY: h_a (height of anemograph above M.S.L.) = height of ground above M.S.L. + height of anemograph above ground = 5 m. + 23 m. 1945

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust	Mean	Max. gust
	metres per second																							
1	1·4	7	*8·4*	20	5·5	16	*10·3*	23	3·9	14	5·4	19	5·1	18	3·8	11	4·1	12	1·1	5	2·9	11	2·9	9
2	2·4	8	8·2	*25*	3·4	13	6·5	*24*	2·6	13	5·9	18	3·9	14	2·7	12	5·8	14	1·5	7	1·1	5	4·5	14
3	5·7	20	3·0	13	2·4	11	5·6	19	2·6	11	4·6	15	2·0	8	1·1	7	4·3	12	1·2	5	1·2	7	3·1	13
4	5·7	18	5·9	18	4·0	14	4·1	11	3·4	11	4·6	13	3·5	11	1·5	9	2·4	8	*0·5*	4	2·9	9	2·8	14
5	3·7	14	4·5	13	2·7	11	4·8	15	3·9	16	3·3	13	2·0	9	2·2	13	4·3	12	0·8	5	1·3	6	4·6	17
6	1·4	4	4·0	13	4·2	12	1·9	7	5·5	16	4·7	15	3·1	13	2·5	15	3·5	10	1·8	7	2·0	9	2·9	13
7	4·0	18	6·9	20	3·9	12	3·8	9	2·3	9	*7·5*	*21*	3·5	11	2·7	10	2·2	6	0·9	4	1·5	5	1·0	5
8	5·3	18	4·8	15	3·6	12	3·5	8	3·9	12	5·7	17	*1·1*	9	1·4	11	2·9	10	1·5	7	4·2	15	4·9	13
9	4·4	16	6·3	18	1·6	7	4·3	10	3·2	15	4·2	14	3·5	14	3·8	14	2·1	9	1·8	11	4·6	12	2·0	14
10	4·7	12	6·0	18	2·1	9	5·2	13	2·2	11	4·6	14	3·2	14	4·4	*17*	2·1	9	3·3	15	4·4	15	*0·4*	4
11	5·4	16	3·2	11	*1·0*	5	2·3	12	2·2	10	4·0	12	3·4	11	2·1	9	2·6	8	1·6	7	3·6	13	1·7	7
12	6·5	16	4·9	17	1·3	7	2·4	13	*1·4*	7	4·7	16	2·6	11	2·3	7	2·2	12	1·2	9	4·2	13	1·9	8
13	6·2	16	7·3	19	1·1	6	1·2	9	5·4	*21*	3·8	12	5·1	16	3·0	9	3·6	14	1·7	7	4·1	12	4·8	15
14	5·5	14	4·0	15	1·9	7	3·4	13	*7·6*	19	3·7	13	2·0	20	1·8	9	5·2	17	1·4	7	2·2	7	0·6	5
15	3·1	10	1·5	6	3·3	8	3·0	12	4·7	13	4·5	14	5·2	18	2·9	13	3·9	13	0·8	7	1·7	8	3·2	13
16	2·3	8	1·9	6	3·6	13	2·5	11	4·7	13	2·0	9	*6·2*	*20*	4·4	15	5·7	15	0·5	4	5·4	16	6·2	15
17	3·8	11	4·0	13	2·5	8	*0·7*	5	2·7	10	2·3	11	2·2	9	3·1	10	2·2	8	3·3	11	*6·8*	*17*	7·3	18
18	*9·1*	26	2·1	8	4·7	16	1·3	8	3·1	11	*1·4*	8	4·8	12	4·1	13	3·3	12	3·1	9	4·7	12	*8·3*	20
19	8·2	*27*	*1·1*	7	7·6	*21*	2·0	9	6·0	13	4·8	14	5·8	19	3·3	11	4·8	15	3·1	10	2·8	7	3·6	15
20	4·4	22	2·9	11	4·5	13	2·3	9	4·3	12	4·5	14	6·0	19	1·7	10	5·4	16	2·5	11	1·3	4	1·3	5
21	3·3	12	1·5	7	2·7	10	4·2	15	1·8	10	2·4	10	5·2	14	4·4	15	2·1	9	3·5	14	*0·2*	3	4·8	12
22	1·8	8	3·3	8	1·9	9	3·6	13	3·3	11	2·5	12	4·4	15	4·3	16	5·4	15	5·0	19	1·6	7	3·7	15
23	3·9	14	3·8	11	3·4	12	2·7	9	2·2	12	3·2	11	3·5	11	3·9	13	5·1	*21*	6·3	*28*	2·1	6	3·0	17
24	*0·9*	5	2·8	10	3·9	14	2·7	12	3·1	13	2·4	11	2·0	8	*6·0*	15	*5·9*	19	8·6	24	1·3	6	6·7	*21*
25	2·3	7	7·2	17	1·4	11	1·3	6	2·7	14	1·7	8	2·1	9	2·8	11	5·0	18	8·0	27	0·9	5	4·6	15
26	2·5	11	6·6	18	3·6	13	1·4	7	2·5	14	2·2	9	4·5	15	*0·9*	5	2·3	9	*9·5*	25	3·6	13	2·9	12
27	3·4	13	3·6	11	3·0	9	3·4	13	3·2	13	3·6	15	4·0	15	2·8	8	3·0	11	4·3	16	1·4	6	3·6	13
28	5·2	16	2·8	9	3·9	12	3·9	16	2·0	10	1·7	7	2·1	10	2·4	9	1·7	9	4·2	14	1·2	5	4·2	15
29	2·1	13			6·4	17	4·4	20	3·5	14	2·4	13	2·1	10	2·3	11	1·2	5	2·1	11	0·6	7	3·9	12
30	4·4	13			5·8	19	3·6	15	4·4	16	5·2	18	2·5	11	2·9	9	*0·9*	5	1·2	7	1·7	8	0·9	5
31	5·5	17			*8·5*	21			6·2	19			2·4	10	2·2	9			0·9	6			2·1	7

WIND

Monthly and annual means of mean wind speed between exact hours, G.M.T.

177 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1945

	Hour G.M.T. 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Mean
	metres per second																								
Jan.	3·7	3·9	4·0	4·0	4·0	4·1	4·1	4·0	4·1	4·2	4·6	4·7	4·8	*5·0*	4·7	4·3	4·3	4·1	3·8	4·1	4·0	3·6	*3·6*	3·7	4·1
Feb.	4·1	4·3	4·5	4·4	4·1	4·3	4·2	4·3	4·1	4·3	4·9	4·9	5·0	*5·2*	4·9	4·7	4·4	4·1	4·3	4·2	4·2	4·0	3·9	*3·8*	4·4
Mar.	2·5	2·5	*2·5*	2·7	2·6	2·6	2·7	2·7	3·1	3·7	4·3	4·5	*4·9*	4·9	4·8	4·7	4·5	4·1	3·8	3·8	3·7	3·3	3·1	3·7	3·5
Apr.	2·6	2·5	2·5	2·8	2·8	2·9	2·8	3·2	3·8	3·9	4·5	4·5	4·5	*4·6*	4·5	4·5	4·5	4·0	3·7	2·9	2·7	2·5	2·3	*2·3*	3·4
May	2·6	2·7	2·7	2·4	2·5	*2·4*	2·8	3·2	3·7	4·1	4·2	4·5	4·6	4·4	4·6	4·6	4·5	4·5	*4·7*	4·0	3·3	2·9	2·9	2·8	3·6
June	2·5	2·5	*2·3*	2·5	2·5	2·6	3·1	3·9	4·2	4·5	4·8	4·7	5·0	5·1	*5·3*	5·1	5·3	4·9	4·6	3·8	3·4	3·1	2·7	2·4	3·8
July	2·2	*2·0*	2·1	2·2	2·5	2·6	3·0	3·6	4·0	4·2	4·6	4·4	4·3	4·5	4·7	4·7	*5·0*	4·5	4·3	3·7	3·1	2·9	2·7	2·5	3·5
Aug.	2·3	2·2	*2·1*	2·3	2·2	2·1	2·4	2·7	2·8	3·1	3·4	3·5	3·8	3·8	*3·9*	3·9	3·7	3·3	3·2	2·6	2·5	2·7	2·5	2·4	2·9
Sept.	2·8	*2·6*	2·8	2·8	2·9	2·8	2·9	3·3	3·4	3·9	4·0	4·4	4·4	4·7	*4·8*	4·7	4·1	3·6	3·6	3·4	3·3	3·1	2·9	3·0	3·5
Oct.	2·4	2·2	2·3	2·3	2·2	2·3	2·3	2·5	2·8	3·2	3·5	3·9	*4·0*	4·0	3·9	3·7	3·1	2·9	2·4	2·2	2·4	*2·2*	2·3	2·5	2·8
Nov.	2·2	*1·9*	2·0	2·0	2·2	2·2	2·3	2·2	2·5	2·7	3·9	3·2	3·3	3·2	*3·4*	3·2	3·0	2·9	2·9	2·4	2·5	2·4	2·2	2·3	2·6
Dec.	3·3	3·5	3·5	3·4	3·3	3·5	3·4	3·4	3·3	3·3	3·4	3·8	3·9	*4·1*	3·8	3·8	3·4	3·5	3·6	3·4	3·4	3·5	*3·2*	3·4	3·5
Annual	2·8	2·7	2·8	2·8	2·8	2·8	3·0	3·3	3·5	3·8	4·1	4·3	4·4	*4·5*	4·4	4·3	4·1	3·9	3·7	3·4	3·2	3·0	2·8	2·8	3·5

DISTRIBUTION OF WIND SPEED, EXTREME VELOCITIES AS RECORDED BY PRESSURE-TUBE ANEMOGRAPH

178 KEW OBSERVATORY: h_a = 5 m. + 23 m. 1945

	DISTRIBUTION OF WIND SPEED								EXTREME VELOCITIES				
	More than 17·1 m./sec.		10·8 to 17·1 m./sec.		5·5 to 10·7 m./sec.	1·6 to 5·4 m./sec.	Less than 1·6 m./sec.	No record	Highest hourly wind			Highest gust	
	Dates of occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration	Veer from N.	Speed	Hour ended	Speed	Date
		hr.		hr.	hr.	hr.	hr.	hr.	°	m./sec.	day h.	m./sec.	day h. m.
Jan.	–	0	2	15	189	440	100	0	225	14	18 14	27	19 2 20
Feb.	–	0	3	7	196	379	90	0	260	12	2 13	25	2 13 10
Mar.	–	0	2	6	126	455	157	0	225	12	19 21	21	19 20 45
Apr.	–	0	2	11	92	435	182	0	225	15	2 1	24	2 0 5
May	–	0	1	1	143	459	141	0	220	11	13 16	21	13 15 30
June	–	0	1	2	148	457	113	0	225	12	7 15	21	7 14 45
July	–	0	0	0	139	459	146	0	225	10	16 8	20	16 7 20
Aug.	–	0	0	0	55	508	181	0	225	8	24 17	17	10 13 0
Sept.	–	0	0	0	126	479	115	0	80	8	2 14	21	23 14 25
Oct.	–	0	3	10	108	309	317	0	220	12	24 12	28	23 7 45
Nov.	–	0	0	0	68	390	262	0	85	10	17 9	17	17 8 20
Dec.	–	0	0	0	166	388	190	0	190	10	18 9	21	24 4 10
Year	–	0	14	52	1556	5158	1994	0	225	15	Apr. 2 1	28	Oct. 23 7 45

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	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.	30 cm.	122 cm.
											degrees	*Absolute*												
1	74·8	79·8	75·1	78·0	80·5	80·1	82·7	81·4	80·8	83·5	87·5	85·9	88·9	87·7	90·6	89·0	89·3	88·7	86·2	87·3	83·8	85·7	79·5	82·9
2	74·8	79·6	77·3	78·0	79·2	80·2	83·1	81·7	81·0	83·3	87·1	85·9	88·9	87·4	90·0	89·0	89·3	88·8	86·1	87·2	84·1	85·4	81·0	82·9
3	74·9	79·3	77·1	78·0	78·0	80·2	82·9	81·8	81·3	83·2	87·2	85·9	88·2	87·4	90·3	89·0	89·1	88·6	86·5	87·2	84·3	85·4	80·4	82·9
4	75·1	79·3	77·5	78·1	78·0	90·3	82·3	81·9	81·2	83·1	87·7	86·0	89·1	87·4	91·1	89·0	89·0	88·5	86·2	87·1	84·6	85·4	78·8	82·8
5	75·0	79·2	78·4	78·1	78·1	80·2	82·2	81·9	82·0	83·1	87·9	86·1	89·3	87·4	91·6	89·0	89·0	88·4	85·3	87·1	84·6	85·3	79·5	82·7
6	74·8	79·1	78·7	78·2	79·0	80·1	81·9	82·0	83·4	83·1	88·0	86·0	90·5	87·6	91·0	89·0	88·3	88·5	85·0	87·1	84·3	85·3	78·8	82·7
7	74·7	79·1	79·2	78·3	79·5	80·1	82·0	82·0	84·2	83·1	88·4	86·1	90·0	87·6	90·9	89·0	88·1	88·4	85·0	87·0	83·5	85·3	77·7	82·6
8	74·8	79·1	78·8	78·5	79·8	80·1	81·4	82·1	86·0	83·1	88·1	86·1	90·9	87·7	89·5	89·0	88·2	88·3	85·0	87·0	83·2	85·3	77·7	82·3
9	74·7	79·0	78·7	78·8	78·9	80·1	81·4	82·1	87·0	83·3	88·0	86·2	91·2	87·9	89·4	89·0	88·0	88·4	84·8	86·9	83·1	85·3	76·8	82·2
10	74·7	78·9	78·9	78·9	79·0	80·1	81·6	82·1	86·5	83·3	87·7	86·3	90·8	87·9	89·2	89·0	88·2	88·2	84·6	86·8	82·8	85·1	76·1	82·1
11	74·7	78·8	77·6	79·0	79·6	80·2	82·4	82·0	86·8	83·9	88·0	86·3	89·7	88·0	89·9	89·0	89·0	88·2	85·0	86·7	81·9	85·1	76·0	81·9
12	74·8	78·7	77·8	79·0	78·8	80·2	83·1	82·1	88·0	83·9	88·1	86·2	90·2	88·1	90·5	88·9	89·8	88·1	86·1	86·6	81·4	85·0	76·5	81·7
13	75·3	78·7	79·4	79·1	78·7	80·2	83·1	82·1	89·0	84·1	87·9	86·2	91·0	88·0	90·6	88·8	90·0	88·1	86·4	86·5	81·5	84·9	77·0	81·6
14	75·4	78·7	78·8	79·1	79·0	80·2	83·2	82·2	88·0	84·2	88·2	86·3	91·6	88·0	90·1	88·8	89·3	88·2	85·7	86·5	81·6	84·7	77·3	81·4
15	75·2	78·5	78·2	79·1	79·5	80·2	84·1	82·3	87·6	84·4	88·6	86·3	92·2	88·1	90·3	88·8	88·9	88·2	85·0	86·4	81·0	84·6	77·2	81·2
16	75·3	78·4	78·3	79·1	80·0	80·2	84·5	82·3	87·9	84·9	88·4	86·4	92·1	88·2	90·0	88·9	89·1	88·2	84·4	86·4	80·4	84·4	79·0	81·2
17	76·0	78·4	79·0	79·2	80·3	80·2	84·8	82·4	88·5	85·0	87·9	86·6	90·9	88·3	90·1	88·9	89·2	88·2	85·0	86·4	80·0	84·2	80·0	81·1
18	76·5	78·3	80·0	79·3	79·9	80·4	85·0	82·6	89·0	85·1	88·0	86·5	91·2	88·4	90·2	88·9	90·0	88·3	85·1	86·3	80·0	84·1	80·3	81·1
19	76·4	78·3	80·7	79·3	80·4	80·4	85·1	82·9	88·4	85·1	88·9	86·6	92·0	88·5	89·8	88·8	89·8	88·2	84·0	86·2	80·6	83·9	80·6	81·2
20	75·3	78·3	81·1	79·4	80·7	80·6	85·0	83·1	87·7	85·2	90·2	86·7	91·3	88·5	89·3	88·7	89·7	88·2	84·0	86·2	80·7	83·8	79·2	81·3
21	75·0	78·6	79·8	79·8	80·0	80·7	85·4	83·2	87·2	85·4	89·0	86·8	91·1	88·5	89·4	88·7	88·6	88·2	85·3	86·1	81·3	83·8	78·5	81·4
22	74·8	78·6	79·0	79·9	80·3	80·7	84·3	83·4	87·6	85·3	89·6	86·9	91·4	88·7	89·5	88·7	88·6	88·2	85·8	86·1	82·2	83·7	78·7	81·3
23	74·7	78·4	79·8	80·0	80·5	80·8	83·5	83·5	88·0	85·4	90·7	87·0	91·2	88·9	89·4	88·6	87·5	88·3	85·5	86·1	82·2	83·7	78·7	81·3
24	74·7	78·3	78·8	80·0	80·8	80·9	83·1	83·6	87·6	85·4	91·3	87·1	91·8	88·8	89·5	88·6	87·2	88·2	86·0	86·1	81·9	83·6	79·1	81·3
25	74·4	78·3	78·7	80·0	81·4	80·9	83·2	83·6	86·6	85·6	91·5	87·3	91·9	88·8	89·8	88·6	86·1	88·1	85·1	86·0	81·1	83·6	79·3	81·3
26	74·4	78·2	79·8	80·0	81·6	80·9	83·0	83·6	87·4	85·6	91·2	87·3	91·9	88·9	89·2	88·8	85·5	88·0	84·8	86·1	80·8	83·6	79·2	81·3
27	74·2	78·2	80·8	80·1	81·4	81·1	83·1	83·5	87·3	85·7	90·1	87·5	90·5	88·9	89·3	88·7	86·2	87·9	84·4	86·1	80·0	83·6	79·8	81·3
28	74·1	78·1	80·9	80·1	82·0	81·1	82·7	83·5	86·8	85·7	89·2	87·7	90·5	89·0	90·0	88·6	86·7	87·8	84·7	86·0	78·6	83·4	79·7	81·3
29	74·0	78·1			82·8	81·1	82·1	83·5	87·0	85·7	89·0	87·6	90·4	89·0	90·2	88·5	85·6	87·5	84·9	85·9	78·9	83·2	79·1	81·2
30	74·0	78·0			82·8	81·2	81·5	83·5	87·2	85·8	89·2	87·7	90·6	88·9	90·0	88·6	85·5	87·7	84·1	85·8	79·4	83·1	77·9	81·2
31	74·1	78·1			82·2	81·3			87·3	85·8			90·4	88·9	89·8	88·6			83·4	85·9			77·0	81·1
Mean	74·9	78·7	78·9	79·1	80·1	80·5	83·1	82·6	86·3	84·5	88·7	86·6	90·7	88·2	90·0	88·8	88·3	88·2	85·1	86·5	81·8	84·5	78·6	81·7
												Year	83·9	84·2										

MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 21h. TO 9h., G.M.T.

180 KEW OBSERVATORY 1945

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
						degrees	*Absolute*					
1	63·8	79·2	75·8	81·4	65·4	77·9	81·4	85·2	77·5	76·8	75·2	75·4
2	72·4	80·1	64·5	82·8	*63·9*	80·4	80·3	77·9	85·7	74·1	83·0	82·0
3	74·1	71·3	*61·8*	75·3	71·9	77·4	*74·7*	78·6	83·1	83·5	79·9	75·2
4	69·6	76·9	70·8	73·8	74·2	79·2	81·7	77·0	86·7	76·9	81·8	65·7
5	71·7	80·4	65·2	76·5	76·8	78·6	88·2	79·3	85·1	74·4	78·9	77·1
6	62·9	72·9	78·0	68·2	84·5	86·3	79·6	78·1	82·0	73·0	79·2	71·5
7	70·7	81·9	78·2	73·9	81·1	87·4	84·7	78·1	82·7	72·3	72·6	65·7
8	68·7	72·1	75·1	71·1	85·3	81·2	75·0	82·3	80·7	73·1	78·0	72·2
9	72·6	74·6	64·6	69·2	85·6	78·7	76·9	82·9	78·1	72·4	76·7	65·6
10	68·6	74·1	68·6	68·8	74·4	81·4	86·8	85·2	84·7	73·3	76·3	*64·3*
11	69·7	70·7	69·7	76·8	78·2	85·8	84·6	77·9	88·6	75·7	70·2	69·2
12	73·0	74·6	65·6	80·2	79·4	82·4	80·0	87·5	88·3	85·3	75·8	66·3
13	74·8	81·6	66·2	71·0	79·9	80·6	81·6	85·8	85·3	85·3	75·8	76·3
14	73·2	71·4	67·4	70·2	79·3	79·2	85·2	85·6	83·5	74·7	77·6	66·3
15	73·1	69·8	69·2	85·9	80·8	79·8	89·1	85·3	80·3	72·5	69·2	73·6
16	66·9	74·3	73·5	76·0	84·1	76·9	86·1	80·6	85·9	74·9	70·8	81·6
17	74·7	79·6	75·0	74·3	81·3	*72·7*	77·4	86·2	81·8	75·3	75·8	81·1
18	76·2	81·7	65·3	75·6	80·2	73·0	85·1	79·1	84·0	78·7	73·3	81·2
19	71·9	77·0	78·0	74·1	80·7	74·1	84·8	84·7	83·5	*71·2*	80·2	79·7
20	69·1	81·7	74·6	71·7	81·3	88·3	85·7	83·6	87·8	73·2	78·1	67·2
21	62·6	65·9	66·7	79·4	74·8	77·0	86·9	79·1	78·6	85·9	82·0	70·2
22	65·8	67·0	67·8	69·9	79·7	76·6	84·7	84·1	83·6	76·3	82·5	75·0
23	68·2	77·8	67·7	*65·7*	79·0	87·4	84·1	84·0	78·1	79·1	78·9	70·5
24	63·0	*65·1*	68·7	68·6	77·4	84·8	80·6	85·1	81·9	84·6	72·6	75·9
25	67·7	73·4	75·3	68·8	71·3	78·1	79·4	87·9	77·3	81·3	71·4	77·1
26	66·0	80·8	78·5	69·2	78·7	81·2	86·9	*75·8*	75·0	80·6	73·7	74·7
27	63·5	80·2	77·9	78·4	78·6	78·9	83·9	75·9	79·2	79·2	*66·4*	80·4
28	67·9	77·4	79·8	67·4	70·4	75·7	78·6	80·7	81·2	81·8	*66·4*	75·9
29	*60·1*		83·4	72·8	79·7	82·9	76·6	83·1	*71·6*	82·7	72·0	73·7
30	71·2		76·2	67·6	71·3	81·3	80·2	85·6	73·7	73·1	77·6	66·4
31	75·7		76·1		81·3		83·1	85·9		73·3		70·1
Mean	69·3	75·5	71·8	73·5	77·8	80·2	82·4	82·2	81·9	77·2	75·7	73·1
						Year	76·7					

The initial 2 or 3 of the readings is omitted, i.e. 275·0 degrees is printed 75·0

The minimum "on the grass" refers to the interval from 21h. on the previous day to 9h. on the day to which it is entered.

Add 0·16° to obtain temperature in degrees Kelvin where $T(^{\circ}K.) = t(^{\circ}C.) + 273{\cdot}16$.

ELECTRICAL OBSERVATIONS, UNDERGROUND LABORATORY, WILSON METHOD

Mean value for periods of twenty minutes about 14h. 30m.

F = Potential gradient, unit 1 v./cm. $\lambda+$ = Conductivity due to positive ions, unit 10^{-18} ohm.$^{-1}$ cm.$^{-1}$
i = Air-earth current, unit 10^{-18} amp. cm.$^{-2}$

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	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	...	...	...	4·12	45	184	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	1·51	56	85	...	...	...
3	3·98	18	70	5·36	12	65	3·06	26	79	...	...	...	...	...	...	...	...	...
4	3·11	16	49	...	...	...	...	...	...	...	...	...	...	...	...	1·42	56	80
5	7·01	22	155	4·28	14	60	4·22	20	85	2·04	33	66	...	...	...	...	...	...
6	...	...	...	...	...	...	2·43	31	76	...	...	...	...	...	...	...	...	...
7	...	...	...	2·85	23	65	...	...	...	5·17	17	88	1·67	60	101	0·91	124	113
8	...	...	...	...	...	...	2·76	41	113	...	...	...	...	...	...	...	...	...
9	...	...	...	5·30	24	128	...	...	...	7·14	20	140	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	7·85	23	178	2·42	29	72	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	5·11	27	139	...	...	...
12	...	...	...	...	...	...	2·18	52	115	1·73	67	116	...	...	...	0·92	80	73
13	...	...	...	...	...	...	...	...	...	1·85	37	69	...	...	...	...	...	...
14	...	...	...	...	...	...	2·84	39	113	...	...	...	...	...	...	1·56	60	93
15	3·98	–	–	...	...	...	3·03	31	94	...	...	...	1·35	56	76	1·52	61	92
16	...	...	...	...	...	...	...	...	...	2·00	79	158	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	5·32	32	171	...	...	...
19	1·89	21	39	...	...	...	...	...	...	2·48	31	78	...	...	...	4·23	49	208
20	...	...	...	...	...	...	2·44	42	103	1·46	61	90	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·18	77	169
22	...	...	...	4·90	17	98	2·17	47	103	...	...	...	1·44	58	83	2·04	72	146
23	...	...	...	2·83	–	–	1·96	71	139	...	...	...	...	...	...	...	...	...
24	6·82	7	46	3·55	26	93	...	...	...	...	...	...	2·42	54	131	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·95	46	44
26	7·05	8	58	3·36	24	81	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	3·23	34	109	1·86	49	91	...	...	...	...	...	...	2·35	76	179
28	...	...	...	2·98	30	88	...	...	...	...	...	...	...	...	...	...	...	...
29	4·95	8	39				2·87	36	103	...	...	...	1·23	60	74	1·34	49	65
30	...	...	...				2·89	48	140	...	...	...	...	...	...	...	...	...
31	...	...	...				...	...	...				...	...	...			
Mean	4·85	14	65	3·86	23	87	2·77	41	110	3·52	41	109	2·50	48	104	1·77	68	115
No. of days used	8	7	7	10	9	9	14	14	14	9	9	9	9	9	9	11	11	11

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i	F	$\lambda+$	i
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	3·15	42	132	...	...	...	...	...	...
3	1·77	50	88	...	...	...	...	...	...	2·88	48	138	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	3·42	23	78	...	...	...	...	...	...
5	2·18	33	72	...	...	...	1·08	54	59	2·03	40	81	...	...	...	...	...	...
6	1·64	53	87	...	...	...	3·44	38	132	...	...	...	3·11	33	102	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	4·11	24	99	9·72	35	345
8	...	...	...	...	...	...	...	...	...	...	...	...	2·92	32	93	...	...	...
9	...	...	...	0·61	10	62	...	...	...	3·05	57	175	...	...	...	...	...	...
10	...	...	...	1·80	46	83	...	...	...	2·72	67	184	...	...	...	3·53	14	50
11	...	...	...	...	...	...	...	...	...	2·91	60	175	...	...	...	3·34	16	52
12	1·75	59	103	...	...	...	...	...	...	5·10	43	218	3·89	25	96	3·27	17	56
13	3·78	47	176	2·25	83	188	...	...	...	...	...	...	...	...	...	2·07	32	66
14	...	...	...	1·12	67	75	...	...	...	...	...	...	5·07	14	71	6·21	13	79
15	...	...	...	...	...	...	...	...	...	1·86	47	87	...	...	...	...	...	...
16	2·13	56	119	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	1·71	54	93	2·04	64	131	4·45	–	–	...	...	...	...	...	...
18	1·60	38	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	1·97	55	109	...	...	...	1·93	54	105	...	...	...	6·15	–	–	...	...	...
20	...	...	...	1·57	69	109	...	...	...	...	...	...	...	...	...	9·82	10	95
21	...	...	...	2·31	60	139	3·38	42	142	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	1·91	50	95	2·04	18	37	...	...	...	...	...	...	1·91	–	–	...	...	...
24	1·35	47	64	...	...	...	...	...	...	2·64	39	103	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	2·32	–	–	...	...	...	1·42	49	70	...	...	...
27	...	...	...	2·51	44	110	3·37	54	181	...	...	...	7·76	9	68	...	...	...
28	...	...	...	3·46	124	427	2·67	33	88	...	...	...	5·83	–	–	...	...	...
29	...	...	...	...	...	...	...	...	...	3·42	42	145	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	3·62	16	58	...	...	...
31	...	...	...	1·91	26	50				3·79	29	109				...	...	...
Mean	2·01	49	97	1·94	55	125	2·53	48	120	3·19	45	135	4·16	25	82	5·42	20	106
No. of days used	10	10	10	11	11	11	8	7	7	13	12	12	11	8	8	7	7	7
Year: Mean										3·21	40	105						
No. of days used										121	114	114						

	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	0	...	1	1·7	0	...	1	0·2	1	0·2	1	1·7
2	1	0·6	1	2·0	0	...	1	2·0	1	0·3	1	1·2
3	2	3·7	1	1·7	0	...	1	0·3	2	7·1	1	1·1
4	1	2·2	1	2·5	2	4·4	1	0·1	1	0·1	0	...
5	1	1·6	0	...	0	...	1	2·1	2	5·7	1	0·5
6	1	0·6	2	3·7	1	0·4	1	0·2	1	0·1	1	0·9
7	1	0·9	0	...	0	...	0	...	1	1·9	0	...
8	1	2·4	1	1·6	1	0·2	0	...	1	0·6	1	1·3
9	2	8·0	1	1·8	1	0·1	0	...	1	6·3	1	0·6
10	2	3·4	1	2·9	0	...	0	...	0	...	2	4·0
11	1	1·9	2	4·9	0	...	1	1·7	0	...	1	0·1
12	2	8·3	1	0·5	1	0·1	0	...	0	...	1	1·8
13	0	...	1	0·6	0	...	0	...	0	...	0	...
14	1	0·5	0	...	0	...	1	0·2	0	...	0	...
15	2	3·7	0	...	1	0·1	0	...	0	...	0	...
16	1	0·1	0	...	1	0·9	0	...	0	...	0	...
17	0	...	0	...	0	...	0	...	0	...	0	...
18	2	4·5	1	0·8	0	...	0	...	0	...	0	...
19	1	0·9	0	...	1	0·9	0	...	0	...	0	...
20	1	1·2	0	...	0	...	0	...	1	2·2	1	0·1
21	0	...	1	0·1	0	...	0	...	2	5·5	1	1·2
22	1	1·0	0	...	0	...	1	0·6	0	...	1	0·2
23	1	1·7	1	0·9	0	...	0	...	2	4·2	1	0·6
24	0	...	0	...	0	...	0	...	0	...	0	...
25	1	2·9	0	...	1	1·9	1	0·1	0	...	0	...
26	1	2·0	0	...	2	7·5	2	9·7	1	1·5	1	0·4
27	1	2·1	0	...	0	...	1	0·6	1	1·6	1	0·6
28	2	3·0	0	...	1	0·2	2	6·2	0	...	1	2·8
29	0	...			1	0·2	2	3·8	1	0·6	1	0·5
30	2	4·4			1	0·5	1	1·9	0	...	1	0·4
31	1	0·4			0	...			0	0·5		
Total	-	62·0	-	25·7	-	17·4	-	29·7	-	32·4	-	20·0
No. of days used	-	31	-	28	-	31	-	30	-	31	-	30
Mean	-	2·0	-	0·9	-	0·6	-	1·0	-	1·0	-	0·7

	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient	Character	Duration of negation potential gradient
		hr.		hr.		hr.		hr.		hr.		hr.
1	1	1·5	1	0·5	1	2·1	1	0·1	1	0·2	1	0·5
2	0	...	0	...	1	0·4	1	0·5	0	...	1	2·2
3	0	...	0	...	1	1·0	0	...	0	...	1	0·2
4	0	...	0	...	2	11·7	0	...	1	1·3	2	3·6
5	0	...	0	...	2	3·5	1	0·2	1	0·4	0	...
6	0	...	1	2·0	0	...	1	0·3	1	0·3	0	...
7	0	...	1	0·7	0	...	0	...	0	...	0	...
8	0	...	1	2·9	1	0·1	0	...	0	...	1	0·1
9	1	0·1	2	6·3	1	0·3	0	...	0	...	0	...
10	2	17·0	1	1·7	1	0·1	0	...	1	2·6	1	0·8
11	1	2·5	0	...	0	...	1	0·5	1	0·9	1	1·3
12	0	...	0	...	0	...	1	0·3	0	...	1	0·2
13	0	...	1	1·6	1	1·2	1	0·1	1	2·0	1	0·5
14	2	7·5	1	0·2	1	0·7	1	1·0	0	...	0	...
15	1	1·2	1	0·3	0	...	1	0·1	0	...	1	0·4
16	1	0·5	0	...	0	...	0	...	0	...	1	0·5
17	0	...	0	...	0	...	0	...	0	...	1	2·4
18	0	...	0	...	1	0·7	0	...	0	...	1	2·6
19	1	0·2	0	...	1	0·2	0	...	0	...	1	2·5
20	0	...	1	0·1	1	2·2	0	...	0	...	0	...
21	0	...	1	0·2	1	0·3	0	...	0	...	0	...
22	0	...	2	4·3	1	0·2	1	0·3	2	6·3	2	4·2
23	0	...	1	1·3	1	1·0	2	3·5	1	0·6	1	1·6
24	0	...	1	0·1	1	1·9	2	3·4	0	...	1	2·9
25	1	0·9	0	...	0	...	2	5·8	0	...	1	1·9
26	1	2·0	0	...	1	0·1	1	2·5	1	0·2	1	2·1
27	1	2·2	0	...	0	...	0	...	0	...	0	...
28	0	...	1	0·2	1	0·5	2	5·3	1	0·2	2	9·7
29	0	...	1	0·8	0	...	2	4·0	0	...	2	9·1
30	1	2·3	0	...	1	0·2	1	0·4	0	...	0	...
31	1	0·9	0	...			1	1·1			0	...
Total	-	38·8	-	23·2	-	28·4	-	29·4	-	15·0	-	49·3
No. of days used	-	31	-	31	-	30	-	31	-	30	-	31
Mean	-	1·3	-	0·7	-	0·9	-	0·9	-	0·5	-	1·6

Annual values: Character 0 1 2
No. of days used 164 165 36

Duration: Total 371·3 hr.
No. of days 365
Mean 1·02 hr.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)

Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JANUARY, factor 4·30				FEBRUARY, factor 4·41				MARCH, factor 4·43			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	285	760	1560	620	90	260	285	65	340	420	350	275
2	335	940	850	685	105	130	310	455	195	650	275	625
3	475	450	375	140	440	715	510	430	300	510	285	155
4	75	490	335	285	-80	325	285	415	210	220	185	-420
5	180	415	595	155	115	375	350	350	260	650	390	315
6	595	695	465	810	340	130	170	365	105	275	260	220
7	425	685	490	310	130	145	310	545	220	445	300	235
8	295	450	170	270	430	545	0	365	220	130	275	665
9	75	Z±	Z±	-25	210	470	390	80	300	575	340	40
10	40	270	630	-40	-195	560	730	660	170	275	185	365
11	155	775	385	170	180	105	50	535	380	445	130	105
12	245	-400	115	270	155	245	365	285	275	470	210	380
13	360	760	570	310	105	115	285	570	285	470	315	390
14	220	450	270	630	415	660	340	755	220	315	275	285
15	385	295	245	140	585	910	325	375	115	285	325	300
16	335	660	200	425	195	375	375	440	210	115	195	380
17	360	670	295	555	155	375	310	340	185	380	210	285
18	155	270	Z±	285	180	375	415	340	405	495	195	365
19	220	375	220	465	235	675	440	440	115	90	155	-15
20	335	450	450	385	300	495	350	640	285	485	250	520
21	195	475	515	810	375	375	300	325	380	550	220	390
22	295	180	570	245	300	480	470	375	365	510	235	535
23	440	720	465	105	375	275	275	195	455	520	195	445
24	465	555	580	825	455	415	350	625	495	315	185	470
25	775	735	1100	-130	260	310	235	340	115	235	285	285
26	415	-155	720	685	145	365	310	365	Z-	Z±	315	325
27	335	515	310	245	210	520	325	340	105	315	195	365
28	25	-25	205	450	245	300	310	415	80	195	285	380
29	620	865	530	230					235	285	250	185
30	25	-270	440	320					210	285	260	445
31	335	360	130	195					155	195	170	115
(a)	306	549	476	394	259	394	327	408	246	370	248	339
(b)	319	453	476	364	231	394	327	408	246	370	246	303
Mean	(a) 431		(b) 403		(a) 347		(b) 340		(a) 301		(b) 291	

	APRIL, factor 4·44				MAY, factor 4·40				JUNE, factor 4·26			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	80	80	145	105	200	355	170	660	170	-260	180	285
2	-25	170	210	275	200	315	170	315	210	235	180	310
3	210	235	185	80	240	275	-1345	Z-	130	285	90	245
4	235	380	290	235	200	420	185	290	210	285	155	195
5	-575	290	210	340	-55	40	90	145	155	285	285	285
6	380	640	210	235	65	210	210	450	180	195	220	145
7	355	485	460	460	120	530	185	420	130	220	115	220
8	315	470	420	460	170	240	265	315	170	235	310	325
9	235	445	615	760	225	210	130	395	310	340	145	325
10	395	430	630	630	330	450	265	555	285	235	-15	195
11	395	825	260	510	355	620	595	145	170	325	115	170
12	325	380	185	355	170	385	160	210	170	245	50	0
13	325	640	185	120	160	240	160	290	90	210	155	170
14	355	355	105	275	225	290	145	210	170	155	170	170
15	90	210	170	325	130	240	145	225	115	170	145	115
16	195	290	195	300	170	240	185	345	180	235	105	180
17	195	430	170	380	250	305	160	210	115	105	90	130
18	120	355	250	145	160	290	450	210	180	260	170	195
19	210	445	235	130	210	250	240	355	170	455	505	375
20	195	460	145	155	275	120	15	395	350	180	90	220
21	50	90	170	225	435	345	315	-80	440	Z-	220	275
22	120	170	155	340	130	290	130	290	310	375	180	275
23	290	325	300	525	250	-620	Z+	240	65	275	180	210
24	340	260	210	470	185	315	180	160	105	220	105	115
25	235	565	155	155	250	305	170	240	145	300	90	130
26	145	605	-525	210	160	250	120	-370	90	210	210	145
27	195	145	235	275	315	330	170	570	130	260	145	105
28	Z-	420	Z+	420	385	315	185	395	285	340	90	210
29	225	405	260	275	225	265	120	290	365	415	155	210
30	250	445	Z+	260	315	265	120	290	195	310	145	105
31					200	250	120	265				
(a)	239	381	250	314	223	299	192	317	193	263	165	201
(b)	200	378	223	313	212	299	192	282	184	245	157	199
Mean	(a) 296		(b) 279		(a) 258		(b) 246		(a) 205		(b) 196	

The potential gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, indeterminate, positive value; Z-, indeterminate, negative value; Z±, indeterminate, in magnitude and sign.

(a) Mean of all positive readings.

(b) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT (reduced to level surface, Paddock site)
Kelvin electrograph standardized by Wilson readings, underground laboratory
Mean values for periods of sixty minutes between exact hours, G.M.T.

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	JULY, factor 4·24				AUGUST, factor 4·26				SEPTEMBER, factor 4·25			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	180	295	385	245	40	235	130	235	235	300	310	205
2	130	230	140	155	310	365	195	365	130	415	390	400
3	180	260	170	230	80	220	180	210	310	415	390	335
4	170	155	140	230	275	350	155	210	325	-155	15	-105
5	180	205	205	385	105	130	40	115	40	-80	105	260
6	320	295	155	180	180	210	115	90	205	335	350	530
7	245	285	130	180	155	235	130	275	335	555	415	375
8	205	245	115	180	145	235	130	285	235	325	300	260
9	205	385	170	295	-25	105	90	-800	140	195	270	530
10	-260	Z-	-230	-310	-80	420	210	310	195	310	195	375
11	25	285	205	260	285	415	235	180	140	220	220	375
12	220	375	180	205	90	220	210	235	195	415	235	235
13	285	505	360	360	40	275	155	325	115	245	205	300
14	320	285	Z-	Z+	130	245	145	130	180	285	205	220
15	105	285	130	270	260	115	145	210	180	300	205	245
16	50	140	205	205	210	275	115	260	115	90	140	205
17	400	335	170	505	170	235	170	245	180	220	205	375
18	360	415	180	400	260	390	235	155	180	220	220	270
19	170	285	170	140	50	220	180	275	50	235	170	235
20	130	230	170	230	170	300	155	260	90	390	155	415
21	105	155	180	310	145	260	210	275	520	440	235	425
22	180	195	90	155	170	245	115	310	80	310	180	390
23	130	260	205	155	90	405	210	310	245	335	335	270
24	220	270	155	155	155	170	130	105	Z-	170	205	400
25	130	350	155	170	170	220	245	310	220	415	285	390
26	130	310	260	195	365	390	130	145	310	465	270	285
27	25	320	205	260	260	470	235	440	235	465	285	245
28	170	285	155	205	220	375	245	300	310	50	270	520
29	285	260	115	230	145	220	220	405	310	675	245	365
30	205	75	155	310	220	245	170	235	140	415	220	270
31	40	195	115	75	115	310	180	155				
(a)	183	272	178	237	173	274	168	245	205	329	241	335
(b)	179	272	178	237	158	274	168	212	205	304	242	317
Mean	(a) 217		(b) 217		(a) 215		(b) 203		(a) 277		(b) 267	

	OCTOBER, factor 4·18				NOVEMBER, factor 4·32				DECEMBER, factor 4·41			
	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.	2-3h.	8-9h.	14-15h.	20-21h.
	volts per metre											
1	140	295	270	560	350	780	40	440	205	520	355	190
2	190	255	355	345	200	120	430	480	175	135	520	915
3	395	510	295	355	350	575	320	415	465	630	545	780
4	215	280	305	355	335	360	480	430	585	95	-230	125
5	600	355	205	380	725	400	430	470	150	490	370	435
6	255	215	240	165	310	240	430	575	330	615	725	915
7	240	370	180	190	390	510	430	375	450	600	780	640
8	240	305	190	355	430	230	185	360	165	395	725	425
9	180	410	320	470	230	335	350	145	205	330	465	750
10	460	345	255	495	175	185	630	120	545	695	450	15
11	370	460	280	75	105	145	255	95	0	300	340	80
12	215	295	435	40	270	295	350	120	615	410	410	600
13	180	355	330	270	135	55	320	135	190	370	165	70
14	125	125	125	320	280	495	390	710	380	585	695	630
15	190	445	180	305	510	520	360	765	490	505	395	205
16	355	395	330	125	415	510	575	725	95	125	395	490
17	90	240	460	510	590	615	710	495	125	300	15	205
18	380	470	575	765	350	390	415	575	-205	190	175	15
19	330	410	445	590	280	430	550	455	110	435	165	835
20	370	380	240	345	95	575	350	350	640	725	970	545
21	115	125	100	205	105	65	200	280	600	530	750	545
22	115	355	255	585	105	255	215	375	300	600	275	-1310
23	50	90	295	305	215	135	200	55	-80	780	520	480
24	-280	-180	305	510	335	415	440	415	175	135	425	640
25	165	100	0	525	400	375	550	390	355	260	490	465
26	-115	25	305	295	350	270	120	360	315	545	545	-40
27	205	395	395	525	145	510	670	550	190	450	465	655
28	50	-155	-115	180	455	520	615	255	-930	95	330	955
29	330	410	355	460	455	535	390	685	-1365	-15	205	275
30	305	590	305	155	575	560	350	350	465	355	585	1035
31	380	690	330	-40					1420	1135	735	695
(a)	249	334	289	359	322	380	392	398	361	445	466	504
(b)	221	302	276	346	322	380	392	398	231	430	444	428
Mean	(a) 308		(b) 286		(a) 373		(b) 373		(a) 444		(b) 358	

The factor used for converting the potential at the collector to potential gradient in volts per metre in the open is given for each month.

Annual means (a)	246	357	283	338
(b)	226	342	277	317
	(a) 306		(b) 291	

POTENTIAL GRADIENT (reduced to level surface): DIURNAL INEQUALITIES

The departure from the mean of the day are adjusted for non-cyclic change †

184 KEW OBSERVATORY — Selected quiet days — 1945

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Non-cyclic change†	Mean
	volts per metre																									
Jan.	−100	*−106*	−95	−82	−28	+34	+15	+77	*+168*	*+168*	+52	+65	+14	−38	−59	−36	+34	+44	+77	−18	+6	−33	−65	−97	+49	302
Feb.	−99	*−105*	−104	−104	−98	−54	+4	+58	+87	*+115*	+61	+23	−20	−38	−62	−38	−3	+76	+79	+63	+59	+71	+32	−3	+32	416
Mar.	−36	−24	−34	−34	−17	−14	+55	+137	*+163*	+116	+76	+18	−63	−75	−86	*−98*	−93	−65	−19	+58	+23	+33	+6	−24	+33	344
Apr.	−41	−53	−69	*−90*	−87	−19	+32	+73	+57	+59	+30	+18	−5	0	−19	−14	−11	0	+30	*+84*	+43	+21	−7	−32	+25	322
May	−37	−44	*−49*	−29	−38	+9	*+87*	+83	+59	+21	−10	−37	−44	−6	−4	0	−20	−27	−13	+5	+27	+32	+31	+10	−49	251
June	−21	−26	−19	−1	+13	+28	+53	*+64*	+53	+51	+16	−3	−15	−29	−33	*−37*	−33	−22	−12	0	0	0	−10	−14	−1	163
July	+5	+17	+10	+9	+15	+41	*+83*	+64	+41	+15	−28	−52	−65	−75	*−76*	−48	−47	−49	−24	+19	+44	+42	+43	+17	−15	232
Aug.	−20	−34	−43	*−53*	−47	−7	+33	+61	+75	*+83*	+42	−2	−30	−28	−47	−32	−18	−16	+1	+9	+38	+22	+13	+2	−36	220
Sept.	−37	−26	−37	−21	−38	−30	+26	+93	*+109*	+69	+4	−13	−21	−39	−27	−31	+2	+24	+19	+27	+36	−11	*−45*	−32	+58	278
Oct.	−20	−39	−51	−55	−46	*−44*	−18	+16	+20	+9	−17	−69	*−70*	−63	−33	+11	+18	+67	*+127*	+100	+95	+48	+15	0	−33	335
Nov.	−36	−41	−34	−59	−49	*−74*	−53	−53	+1	−3	−25	−55	−67	−30	+3	+61	*+117*	+102	+113	+73	+56	+59	+35	−40	−43	437
Dec.	−122	−98	−111	−123	−123	−109	−80	−31	+8	+40	+136	*+128*	+121	+80	+94	+60	+85	+82	+77	+10	+73	+7	−78	*−127*	···	511
Year	−47	−48	−53	*−53*	−45	−19	+20	+54	*+70*	+62	+28	+2	−22	−29	−29	−17	+3	+18	+38	+36	+42	+24	−3	−28	···	318
Winter	−89	−87	−86	*−92*	−75	−51	−29	+13	+66	+80	+56	+40	+12	−7	−6	+12	+58	+76	*+87*	+32	+49	+26	−19	−67	···	417
Equinox	−33	−35	−48	*−50*	−47	−27	+24	+80	*+87*	+63	+23	−11	−40	−44	−41	−33	−21	+7	+39	+67	+49	+23	−8	−22	···	295
Summer	−18	−22	−25	−19	−14	+18	+64	*+68*	+57	+43	+5	−23	−39	−35	*−40*	−29	−29	−29	−12	+8	+27	+24	+19	+4	···	217

Winter: January, February, November, December
Equinox: March, April, September, October
Summer: May to August

† See p. 10, *Observatories' Year Book, 1938*.

AIR POLLUTION: HOURLY MEANS FOR EACH MONTH

185 KEW OBSERVATORY — Complete days only — 1945

	Hour G.M.T. 0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	Mean	No. of days used
	milligrams per cubic metre																									
Jan.	0·16	0·13	*0·12*	0·12	0·12	0·15	0·22	0·28	0·33	0·35	0·32	0·32	0·30	0·29	0·29	0·32	0·35	*0·37*	0·36	0·32	0·31	0·26	0·21	0·17	0·26	31
Feb.	0·04	*0·03*	0·04	0·04	0·04	0·05	0·10	0·16	0·17	0·15	0·15	0·12	0·11	0·11	0·13	0·15	0·19	*0·20*	0·20	0·17	0·14	0·09	0·06	0·04	0·11	28
Mar.	0·12	0·12	0·11	0·10	0·09	0·13	0·19	0·22	0·19	0·14	0·10	*0·05*	0·05	0·05	0·07	0·08	0·13	0·19	*0·23*	0·22	0·19	0·17	0·15	0·14	0·13	31
Apr.	0·07	0·08	0·10	0·10	0·12	0·17	0·22	*0·22*	0·17	0·11	0·07	0·06	*0·05*	0·05	*0·05*	0·05	0·09	0·12	0·13	0·14	0·12	0·12	0·09	0 08	0·11	30
May	0·02	*0·02*	*0·02*	0·03	0·04	0·06	*0·07*	0·07	0·06	0·03	0·04	0·03	0·03	0·03	0·03	0·02	0·02	0·03	0·04	0·03	0·03	0·03	0·03	0·02	0·03	31
June	0·01	0·02	0·02	0·03	*0·05*	*0·05*	0·03	0·03	0·02	0·01	0·01	0·00	*0·00*	0·00	0·00	0·01	0·01	0·01	0·00	0·00	0·01	0·01	0·01	0·01	0·01	30
July	0·02	0·03	0·04	0·06	0·07	0·07	*0·07*	0·06	0·03	0·02	0·02	0·02	0·01	0·02	*0·01*	*0·01*	0·01	0·01	0·02	0·02	0·02	0·03	0·03	0·03	0·03	31
Aug.	0·02	0·03	0·03	0·03	0·03	0·04	0·05	*0·06*	0·04	0·02	0·02	0·01	0·01	0·01	*0·00*	*0·00*	0·01	0·01	0·01	0·02	0·03	0·02	0·02	0·02	0·02	31
Sept.	0·05	0·04	0·04	0·03	0·05	0·04	0·05	0·09	0·07	0·04	0·03	0·03	0·02	0·01	0·02	0·02	0·03	0·04	0·06	0·07	0·08	0·07	0·06	0·06	0·05	30
Oct.	0·20	0·18	0·17	0·15	0·15	0·15	0·16	0·20	0·23	0·15	0·10	0·06	*0·05*	0·06	0·06	0·10	0·15	0·20	0·27	0·30	*0·32*	0·31	0·25	0·21	0·17	30
Nov.	0·22	0·19	0·20	0·15	*0·13*	0·13	0·14	0·17	0·27	0·29	0·28	0·23	0·22	0·21	0·25	0·27	0·30	*0·35*	*0·35*	0·34	0·34	0·34	0·32	0·25	0·25	30
Dec.	0·16	0·13	0·10	0·09	0·07	*0·06*	*0·06*	0·10	0·16	0·30	*0·33*	0·27	0·23	0·21	0·20	0·22	0·23	0·23	0·25	0·26	0·29	0·30	0·27	0·22	0·20	31
Year	0·09	0·08	0·08	*0·08*	0·08	0·09	0·11	0·14	0·15	0·13	0·12	0·10	0·09	0·09	0·09	0·10	0·13	0·15	*0·16*	0·16	0·16	0·15	0·13	0·10	0·11	364
Winter	0·15	0·12	0·11	0·10	*0·09*	0·10	0·13	0·18	0·23	0·27	0·27	0·23	0·21	0·21	0·22	0·24	0·27	0·29	*0·29*	0·27	0·27	0·25	0·21	0·17	0·21	120
Spring	0·09	0·10	0·11	0·10	0·11	0·15	0·21	*0·22*	0·18	0·13	0·09	0·05	*0·05*	*0·05*	0·06	0·07	0·11	0·15	0·18	0·18	0·15	0·15	0·12	0·11	0·12	61
Autumn	0·13	0·11	0·11	0·09	0·10	0·09	0·11	0·15	0·15	0·09	0·07	0·05	*0·03*	*0·03*	0·04	0·06	0·09	0·12	0·17	0·19	*0·20*	0·19	0·15	0·13	0·11	60
Summer	0·02	0·03	0·03	0·04	0·05	*0·05*	*0·05*	*0·05*	0·04	0·02	0·02	0·01	0·01	*0·01*	*0·01*	*0·01*	0·01	0·01	0·02	0·02	0·02	0·02	0·02	0·02	0·02	123